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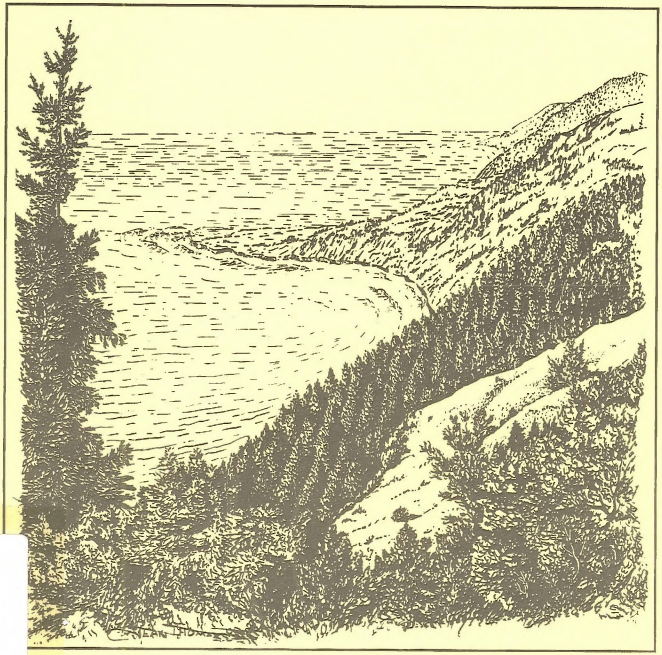
King Range National Conservation Area

Final Visitor Services Plan



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BUREAU OF LAND MANAGEMENT

ARCATA RESOURCE AREA
1125 16TH STREET, ROOM 219
ARCATA, CALIFORNIA 95521-5580

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October, 1992

Dear Interested Citizen:

Enclosed is a copy of the **Final King Range Visitor Services Plan.** This document specifies the management actions the Bureau of Land Management plans to implement in the King Range National Conservation Area (KRNCA) in order to provide services to visitors and to protect natural and cultural resource values.

The plan was developed in order to improve BLM's delivery of visitor services and resource protection by building upon the existing general land use zones contained in the 1974 KRNCA Management Program and taking into consideration wilderness values and guidelines. It also responds to changes in visitation, land ownership patterns and BLM's management responsibilities which have occurred since the 1974 KRNCA Management Program was adopted. The process used to develop this plan is described in Appendix D.

The final plan is a result of a 30-day public review period of the draft plan, after which public comments were analyzed by the King Range Visitor Service Planning Team and BLM staff. Revisions to the plan and environmental assessment have been made in response to public comments. This plan recognizes the wilderness values within the two Wilderness Study Areas (WSA), and only those management actions that do not impair the suitability for preservation as wilderness are prescribed.

This document is a working activity plan that is intended to remain flexible as wilderness designations and visitor trends change. Public involvement is welcome and encouraged to assist BLM in future management of this unique area.

Thank you for your participation and assistance in this planning process.

Sincerely,

Lynda J. Roush
Arcata Area Manager

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VISITOR SERVICES PLAN

KING RANGE NATIONAL CONSERVATION AREA

Prepared by: Bruce R. Cann — 9/10/92
Bruce R. Cann, Outdoor Recreation Planner — Date

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KING RANGE VISITOR SERVICES PLAN

Part I. Introduction

A. Background

The King Range National Conservation Area (KRNCA) was created with the signing of a Declaration of Establishment by Assistant Secretary of the Interior Jack O. Horton on September 21, 1974. Prior to this, Congress enacted Public Law 91-476, the King Range Act, requiring among other things that a study be made of the area and a management program be developed which identified a boundary and zoned the area for primary and secondary uses.

The King Range National Conservation Area Management Program (September, 1974) has been the foundation document directing the Bureau of Land Management's actions in the KRNCA since that time, and in scope and objectives, is very similar to the BLM's Resource Management Plans required under Section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA).

The Management Program makes general land use allocations for the area. Section 602 of the FLPMA extended the boundaries of the KRNCA to the north to their present position, encompassing the entire ocean front from the Sinkyone State Wilderness to the Mouth of the Mattole River. A description of the KRNCA and the legislative history of its establishment is contained in the KRNCA Management Program document of 1974.

Since the development of the original plan, several changes in visitation have occurred which required additional analysis and action. Increase in visitation along the Lost Coast Trail has prompted concern over the effect to coastal wildlife, the existing facilities are inadequate and outdated to handle modern recreational vehicle and visitor demand for secure parking, on-the-ground management presence is required to protect fragile ecosystems and private property rights, to name a few. The original management plan never addressed many of these issues.

B. Location and Setting

The KRNCA is 230 road miles to the north of San Francisco, CA, and 70 miles to the south of Eureka, California. The primary ground transportation route accessing the KRNCA is U.S. Highway 101. From U.S. 101, the northern part of the KRNCA can be reached via Ferndale and Petrolia. Access to the southerly portion of the area is via the Shelter Cove Road out of Redway. Most of the KRNCA is in Humboldt County, while the southernmost two percent is in Mendocino County (Map 1).

The KRNCA encompasses 63,211 acres of which 55,576 (88%) are public land under BLM jurisdiction. The area includes approximately 35 miles of coastline and extends inland as

much as six miles. The King Range rises abruptly from the coastal beach to elevations over 4,000 ft. within three miles. Streams on the west side drain directly into the Pacific Ocean, while east side streams drain into the Mattole River. The climate is mild, with annual averages of over 100 inches of rain (up to 200 inches in places) falling primarily during the winter months. Coastal fog is common during the summer months.

C. Purpose

The purpose of the KRNCA Visitor Services Plan (VSP) is to organize, list and explain the recreation management actions the BLM should take to implement the KRNCA Management Program of 1974 as amended by the FLPMA of 1976, and other land use plans including the King Range Transportation Plan of 1986.

The scope of the VSP includes the federal lands located within the KRNCA, the administrative site at Whitethorn and visitor service contact areas directly adjacent to the KRNCA. The VSP states the visitor management objectives, identifying the recreation activity and setting opportunities to be managed for, recreation experiences to be provided, and interpretive themes, recreation facilities, administrative and staffing needs required to meet the management objectives. The plan also addresses the visitor service actions (interpretation, emergency services, information and educational materials) required to enhance the recreation experience and manage visitor use consistent with the management objectives and sound ecological principles.

The VSP identifies the primary visitor services (i.e., group camping, interpretation, water, parking, trailhead) to be provided and the general location at which the services will be developed in the concept plan. The actual site design, however, for facility development will be developed separately in project plans. Operational and site specific plans, including maintenance plans, search and rescue plans, fire plans and interpretive plans will be developed separately.

D. Method of Plan Preparation

The VSP preparation relied primarily on existing information and the assistance of the volunteer King Range Planning Team. This information was evaluated to determine the current recreation management situation. From this evaluation, visitor management issues were defined, visitor management use zones formulated and zone specific management prescriptions developed. Based on the management prescriptions established for each zone, a concept plan and list of actions were developed to resolve the visitor management issues.

A separate Environmental Assessment addresses the environmental impacts of plan implementation (Appendix D).

Map 1
King Range National Conservation Area
Vicinity Map

Part II. Guidelines for the Planning Effort

A. Planning Assumptions

The Visitor Services Plan was written based on five planning assumptions:

1. The KRNCA contains two Wilderness Study Area's (WSA). These areas are subject to the management constraints placed upon them by the Interim Management Policy (IMP) and Guidelines for Lands under Wilderness Review. Only those management actions that BLM has determined do not impair the land's suitability for preservation as wilderness will be allowed.

2. The VSP will only deal with those management actions required to manage the visitor use within the KRNCA. Management actions dealing with other resource values (i.e., wildlife, timber, watershed management, etc.) will continue to be managed under the King Range Management Plan (1974) and other decisions documented in subsequent activity plans. These activity plans (four allotment management plans, three habitat management plans, one watershed plan and a fire plan) have been reviewed and are consistent with this VSP.

3. The original King Range Management Program document outlined primary and secondary uses with recreation being dominant in 3 of the 7 zones. The VSP expands on the concept identifying specific experience opportunities and activities to be provided within each visitor management zone.

4. The 1986 King Range Transportation Plan will continue to be implemented until such time as modifications may be required to implement new legislation with respect to Congressional wilderness designation.

B. Planning Goals

The planning goals for the VSP include:

1. Provide a framework by which interested visitors and neighboring area residents can actively contribute toward and become involved with the management of the KRNCA.

2. Insure that all planned BLM management actions have the benefit of full public participation, from initial formulation to implementation.

3. Provide facilities and visitor services, i.e., information, interpretation, camping, picnicking, equestrian/hiking trails, etc., to enhance visitor enjoyment while protecting the resource values of the KRNCA.

Part III. Visitor Management Issues

A. Major Issue Identification

The planning team used the constraints listed in Part II-A above to filter the 179 individual issues or concerns identified for this planning process. Only 25 concerns were found to be completely beyond the scope or authority of this planning effort.

The remaining 154 issues and concerns were grouped and consolidated under three major visitor management issues and 21 separate considerations. These major issues form the set of problems and opportunities which the VSP (Part III) addresses.

B. Local Public Concerns

There were several management concerns expressed at the public meetings which are not normally addressed in a visitor management plan, but nonetheless are important to the local communities who have close ties to the KRNCA. These issues include local employment, revenue management and local public involvement in management of the KRNCA.

LOCAL EMPLOYMENT - How can the locally available work force and volunteers be utilized to help develop and manage the King Range?

Discussion: Strong interest has been expressed by local area citizens in becoming part of the work force needed to implement the VSP. Interests ranged from working as docents or volunteer interpreter-guides to laborers, equipment operators and security staff. The BLM will make special efforts to advertise employment opportunities and availability of contracts for bid locally.

REVENUES - What revenue generating actions should be pursued to help defray the costs of managing the KRNCA?

Discussion: Fees collected by the BLM for certain types of uses can be re-applied in the area where the fees were collected. Other types of fees go to other agencies or become general revenues of the United States. Concern was expressed that fees generated within the KRNCA be used for its management. Federal laws and agency guidelines dictate how recreation user fees will be deposited. There are however, methods of retaining fees for interpretive materials and services provided that can be retained in the local area. The use of Cooperative Associations has proved successful and will be explored.

C. Major Issues

Issue 1. Visitor Experiences and Resource Protection

The KRNCA was divided into five visitor management zones. Achieving the management objectives and protection of the recreation and resource values identified in the King Range Act often create conflict. The popularity of the KRNCA has also increased since visitor statistics have been kept. The visitor use patterns and types of recreation activities pursued are in constant change. As with other fragile ecosystems, excessive use can cause campsite deterioration, ecosystem destruction, disruption of wildlife, reduction in visitor expectations and conflicts between users.

What types of visitor services should be provided within the KRNCA to enhance prescribed recreation opportunities, protect natural and cultural resources from excessive or improper visitor use, provide for improved visitor safety and protection of property, and reduce conflicts between visitors as well as conflicts between visitors and neighboring residents?

Considerations:

a. OFF-ROAD VEHICLE CONFLICTS - How can conflicts between off-highway vehicles and other King Range users (hikers, equestrians) be reduced?

   Discussion: This VSP will not reevaluate the off-highway vehicle (OHV) designations documented in the King Range Transportation Plan. These designations will be addressed in the normal update of the King Range Plan. There is concern, however, with the conflict between OHV's and hikers, predominately in the vicinity of Black Sands Beach. Local users and fishermen have had historical OHV use of this area. The VSP will, however, address methods of reducing conflicts and prevention of vehicle use in closed areas, particularly on the beach between Gitchell Creek and Big Flat. Also, how can user conflicts be reduced in areas where off-highway vehicles and hikers or equestrians share a common travel corridor?

b. SANITATION - What sanitation facilities are needed and where should they be located?

   Discussion: Because visitor movement throughout the KRNCA is limited by terrain to narrow corridors, human impacts, including human waste, tend to be concentrated at or near points of interest, resulting in unsanitary conditions. The public has identified a need to provide adequate sanitation to reduce environmental damage and risks to human health.

c. VISITOR USE CAPACITIES - What user capacities should be established for facilities and areas to maintain a quality visitor experience and compatibility with the ecological conditions.

Discussion: Many concerns are related to problems associated with negative environmental impacts of overuse and loss of primitive values or recreation experience opportunities due to excessive numbers of visitors or the lack of controls on certain types of use.

d. INHOLDERS/TRESPASS - How can trespass by visitors on private property, and resultant conflicts, be controlled? What inholder problems are there and how can they be addressed?

Discussion: Trespass or unpermitted use of private property within or adjoining the KRNCA has created problems for many neighboring residents and landowners, particularly in Shelter Cove and on the Smith and Etter properties. Usually such trespass is not deliberate, but rather the result of inadequate signing or misinformed visitors. A number of problems specific to inholders (private properties surrounded by public land within the KRNCA) were identified, including such things as public use of private cabins along the beach, aircraft use of the Big Flat airstrip, road access to inholdings and fire protection.

e. FIRE - What measures (beyond normal California Department of Forestry requirements) are needed to protect visitors, resource values, and private property from the effects of wildfire?

Discussion: A great deal of concern was expressed about the danger of wildfire, which many neighboring residents feel might be increased due to the constraints of the anticipated wilderness designation. Control of bonfires along the beach, maintenance of firebreaks and fire access roads and restrictions on campfires are matters of broad concern.

f. COMMERCIAL USES - What types and levels of commercial uses should be allowed under the BLM permitting system?

Discussion: Commercial enterprises which are dependent upon use of the KRNCA include, but are not limited to, such activities as car and boat shuttle services, hunting guides, pack train operations, horse rentals, OHV rentals and motion picture or commercial photography.

g. INFORMATION & EDUCATION - What measures are needed to provide visitors with more effective orientation concerning the KRNCA's resources, opportunities, limitations and regulations?

Discussion: While signing can provide some essential information, other media are more appropriate for lengthy or complicated informational and educational efforts. Such media might include brochures, books, video-tapes, dioramas, displays, guided tours or personal contacts with area staff and volunteers.

h. MOTORIZED ACCESS - Should motorized vehicle access be re-evaluated?

Discussion: The most frequently raised concerns were focused on motor vehicle access and use within the King Range coastal areas. While the King Range Transportation Plan specifies which roads, trails and areas are available for general public motor vehicle use, the planning team felt that it would be useful to explore ways to clarify or even modify the Transportation Plan if necessary to implement management actions developed through the Visitor Services Plan. Also, Congressional wilderness designation may require modifications to the existing Transportation Plan.

i. HABITAT - What measures should be implemented to protect wildlife habitats?

Discussion: The KRNCA contains a variety of sensitive wildlife habitats including coastal influence zones, Roosevelt elk habitat, riparian areas, anadromous salmonid habitat and an estuary. The Lost Coast is home for a variety of marine animals, including sea lions and pelagic birds which are sometimes influenced by visitors. The plan will explore ways of reducing these conflicts.

j. HISTORICAL/CULTURAL - How can the area's historic and prehistoric resources be interpreted for and protected from the visiting public?

Discussion: The KRNCA contains a wealth of prehistoric cultural sites and has a rich history, much of which has not as yet been adequately recorded or protected from both looting and unintentional damage from human activities. Known sites need protection from harm and unrecorded sites need to be identified. Also, the area has a very interesting history and prehistory which could, if made available, enhance visitors' understanding and appreciation for the KRNCA.

k. PRIMITIVE VALUES - What actions are needed to preserve the primitive character of the King Range?

Discussion: The King Range offers unique opportunities for primitive outdoor experiences. Designation of some part of the area as wilderness via Congressional action is anticipated. Until Congress acts, protection of wilderness values from impairment is needed. Additionally, preserving the primitive character of parts of the KRNCA which may not be included within the Congressionally defined wilderness has been identified as a major concern by both visitors and neighboring residents.

Issue 2. Visitor Health and Safety

By its very nature the KRNCA has historically caused concern for visitor health and safety. The visitor safety problems associated with remoteness, unsafe potable water, search and rescue, and security of vehicles has long been recognized. Clarification of interagency roles and

responsibilities has created a need to adequately pre-plan and prepare for emergency situations and assure the visitor a reasonably safe recreation experience.

Considerations:

a. SECURITY - How should security be provided for King Range visitors and their property?

   Discussion: According to some of the local residents living near major access points, visitors often request storage for personal vehicles while making multi-day visits. Additionally, because of the limited number of on-site agency personnel, some visitors have been threatened by other's abusive behavior and have had nowhere to turn to resolve such problems.

b. POTABLE WATER - Where and how should potable water be provided?

   Discussion: Safe drinking water sources have become a matter of concern in most wildland areas due to the spread of both chemical and biological contaminants.

c. EMERGENCY SERVICES - What additional public safety and emergency services should be provided by the BLM?

   Discussion: King Range visitors are dependent upon locally provided emergency services, placing a heavy burden upon them. Additionally, neighboring residents are often approached by visitors to assist with problems which many residents feel should be handled by the BLM.

d. INTERAGENCY COORDINATION - What agreements, contracts or other instruments are needed to effectively coordinate multi-agency roles, responsibilities and activities?

   Discussion: Due to the proprietary nature of the BLM's jurisdiction, many other local, State and Federal agencies have some form of jurisdiction or responsibility for resources or events within the KRNCA. Coordination of all concerned agency actions within the KRNCA could be assured if formal cooperating relationships are established.

Issue 3. Facility Development, Use Supervision, Administration, and Area Monitoring

Considerations:

a. NEW DEVELOPMENTS - What new facilities are needed and where should they be located?

Discussion: Many concerns were expressed over the lack or inadequacy of facilities needed to accommodate both traditional King Range users, such as equestrians, and relatively new users, such as mountain bicyclists. There was also concern over the problems associated with incompatible uses occurring on the same facilities and location of the facilities in ecologically sensitive areas.

b. SIGNS - What portal, guide, interpretive and regulatory signs are needed and where should they be located?

Discussion: The lack of effective signing limits the ability of the area's visitors to orient themselves, understand the resources and management activities, comply with use restrictions, fully enjoy use opportunities, and avoid hazards or keep from creating problems for themselves, other visitors, and neighboring area residents.

c. MAINTENANCE - To what levels should roads, trails, campgrounds and other facilities be maintained?

Discussion: A major management cost is the continuing maintenance of improvements. The level of maintenance prescribed for the area's roads, trails and other facilities will determine a large part of the area's annual operating budget requirement.

d. TRAILS - What types of trails are needed in the KRNCA?

Discussion: Competition for use of trails between different types of trail users (horse, bicycle, pedestrian) has resulted in conflict between different types of users as well as loss of recreational experience opportunities. Since there are only a finite number of trail location possibilities, it will be necessary to determine which types of trails are needed, specify trail use, and restrict incompatible uses.

e. EQUESTRIAN USES/FACILITIES - What equestrian services and facilities are needed and where should they be located?

Discussion: While the area has great potential for equestrian use, many of the specialized needs of equestrian users are lacking and conflict with non-equestrian users have resulted.

f. TURNOUTS - Should turnouts which are useable for picnicking, scenic vistas, car camping, etc., be provided?

Discussion: A need was identified for undeveloped sites which would be accessible by motor vehicles and could be used by visitors who did not wish to utilize the developed facilities, but rather prefer the unstructured, self-sufficient, vehicle based recreation opportunities.

Part IV. The Management Program

A. Visitor Services Management Theme

The KRNCA will be managed to protect and enhance its natural values while providing opportunities for visitors to experience these unique values. Recreation experience opportunities available to the visitor will cover a broad spectrum, ranging from the unconfined wilderness settings where visitors must be self-reliant and leave no lasting imprint upon the land, to developed settings and facilities where the visitor's comfort, health, safety and informational needs or educational interests are provided for in deliberately modified or improved settings. The KRNCA will be managed to preserve and protect wilderness values within the WSA, and to insure that these values are not impaired by either direct BLM management activity, or the actions of others.

The visitor management philosophy will rely primarily on off-site management actions. The use of interpretive and educational materials will be the primary management tools. Design of structures and recreation facilities will consider the existing ecological values, local design themes and be largely rustic in nature. The development of recreation facilities will be the minimum required to manage the visitors in concert with the ecological capacities of the fragile ecosystems.

B. Zone Specific Management Objectives and Design Parameters

The following Visitor Management Zone objectives will guide the administration of visitation and recreation facility development in the KRNCA (Map 2).

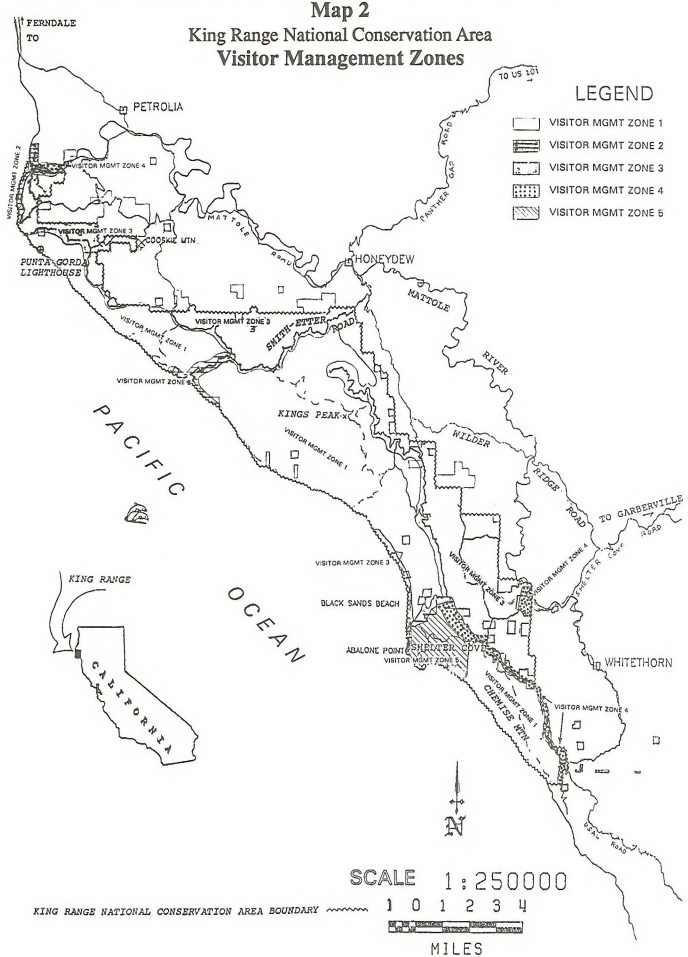
1. Visitor Management Zone 1

This zone will be managed to be essentially free from the evidence of on-site human induced restrictions and controls. Motorized vehicle use will not be allowed in this zone. However, motorized vehicle use may be allowed as determined by the Area Manager to provide reasonable access to private inholders. The zone will be managed to maintain a high probability of experiencing isolation from the sights and sounds of others, with not more than one to two group encounters per day between users, independence, closeness to nature, self reliance through the application of backcountry skills, and an environment that offers a high degree of risk and challenge.

Map 2

King Range National Conservation Area

Visitor Management Zones



Backcountry use levels and the management of renewable resources will be dependent on maintaining natural ecosystems which will allow for natural ecological changes. On site visitor management activities will be designed in harmony with the existing ecological site conditions and will be developed under the concept of "minimum tool."

Primary recreation activities managed for within this zone include hiking, coastal wildlife viewing, hunting, backpacking, camping, horseback riding, nature study, fishing and surfing. Frequency of managerial contact will be low, with off-site controls used as the primary management tool.

This area encompasses 35,340 acres of the KRNCA.

2. Visitor Management Zone 2.

This zone will be managed to be largely free from the evidence of on-site, human induced restrictions and controls. Motorized vehicle use will not be allowed in this zone. However, it may be allowed as determined by the Area Manager to provide reasonable access to private inholders. Limited facilities for the administration of visitor use will be allowed, but off-site administration is encouraged.

The zone will be managed to maintain a good probability of experiencing isolation from the sights and sounds of others, with minimum contact between users, independence, closeness to nature, application of backcountry skills, and an environment that offers a degree of risk and challenge. Backcountry use levels and the management of renewable resources will be dependent on maintaining natural appearing ecosystems.

On-site visitor management activities will stress protection of natural values, in harmony with the existing site conditions and project designs will be rustic in nature.

Primary recreation activities managed for within this zone include hiking, viewing coastal wildlife, backpacking, camping, surfing, horseback riding, nature study and fishing. Frequency of managerial contact will be low, with off-site controls encouraged.

This zone encompasses 882 acres of the KRNCA.

3. Visitor Management Zone 3.

This zone will be managed for predominantly natural or natural appearing environments. Evidence of humans, restrictions and controls are present, but subtle. Motorized vehicle use will be limited to designated roads and trails as specified in the King Range Transportation Plan. Facilities for the administration of visitor use will be allowed. On-site interpretive facilities, dirt and gravel roads and trails, signing, equestrian and camping facilities, and staging areas will be designed to harmonize with the existing natural environment and be the minimum required to achieve the objectives.

Within this zone the concentration of users is low, but there is often evidence of others. Freedom of recreational choice will be maintained with independence and closeness to nature, important. On-site visitor management activities will stress protection of natural values, in harmony with the existing site conditions and project designs will be rustic in nature.

Primary recreation activities managed for within this zone include hiking, viewing coastal wildlife, backcountry vehicle touring, hunting, backpacking, car and RV camping, horseback riding, nature study, mountain biking and fishing.

Frequency of managerial contact will be moderate within developed facilities, trails and roads.

This zone encompasses 22,187 acres of the KRNCA.

4. Visitor Management Zone 4.

This zone will be managed to be a natural appearing environment. Evidence of humans, restrictions and controls are present. Motorized vehicle use will be limited to designated roads and trails as specified in the King Range Transportation Plan. Facilities for the administration of visitor use will be allowed. On-site interpretive facilities, gravelled and paved roads, trails, signing, equestrian and camping facilities, and staging areas will be designed with a rustic theme.

Within this zone the concentration of users is moderate, and there is often evidence of others. Freedom of recreational choice will be maintained with independence and closeness to nature, important. Primary recreation activities managed for within this zone include hiking, viewing coastal wildlife, vehicle touring, car and RV camping, horseback riding, nature study and fishing.

Frequency of managerial contact will be high within developed facilities, and moderate on trails and roads. This zone encompasses 2,249 acres of the KRNCA.

5. Visitor Management Zone 5.

This management zone consists predominately of private land in Shelter Cove. BLM will limit its presence to visitor services only. The management of the existing environment will be influenced by local government and BLM facilities will be designed within those parameters. As with other Visitor Management Zones, the primary design theme will be rustic.

Evidence of humans, restrictions and controls are present. Facilities for the administration of visitor use are the primary objective. On-site interpretive facilities and visitor contact facilities are stressed.

Within this zone the concentration of users is moderate to high, and there is often evidence of others. Primary recreation activities managed for within this zone include walking for pleasure, viewing coastal wildlife, on-site interpretation, vehicle touring, nature study, and fishing.

Frequency of managerial contact will be high within developed facilities, and moderate on interpretive trails.

This zone encompasses 2,553 acres of the KRNCA.

C. Management Actions

The management program for the KRNCA is defined by a series of actions which will be implemented to accomplish the management objectives listed in PART II, and to resolve the issues identified in PART III.

The management actions are addressed by visitor management action categories and by zone. Each major issue and the management actions selected to address that issue are listed and identified below.

1. Land Acquisition

Action 1.1 Acquire easements from private landowners where persistent visitor trespass occurs (Zone: All).

Action 1.2 Continue to acquire inholdings from willing sellers within the KRNCA (Zone: All).

2. Information and Interpretive Services

a. Communications

Action 2.1 Prepare a comprehensive communications, interpretation and signing plan. For each primary visitor facility located on the concept plan, the principal interpretive themes are identified in Appendix C. The specific techniques or methods of communications (i.e., signing, kiosks, brochures, videos, visitor services personnel, contact station, etc.) will be coordinated within this plan. (See Actions 2.2 - 2.14 for additional direction) (Zone: All)

The primary communication themes will include:

a. Location of secure parking areas
b. Off-highway vehicle designations, rules of conduct, environmentally sound and wise use of OHV's, vehicle use area limits
c. Low impact camping, primitive camping techniques, human waste cycle
d. Wildfire hazards and fire management

e. Location of under-utilized areas
f. Emergency services information
g. King Range directional information (trails, roads, hiking routes, points of interest)
h. Availability of commercial services
i. Road conditions, hazards, potable water
j. Entrance or portal signing
k. Hazards
l. Location of public land
m. Equestrian ethics
n. Provide tidal information at trailheads and beach access points.

The primary interpretive themes include:

a. Coastal wildlife (tidepool and beach ecology)
b. Geologic features
d. Anadromous fisheries habitat
e. Historical and cultural features
f. Terrestrial fauna and flora
g. Punta Gorda Lighthouse
h. Multiple-use management
i. Historic land uses
j. Plant and animal adaptation
k. Weather processes
l. Rookery sensitivity, rare and endangered species
m. Recreation opportunities
n. Pedestrian/equestrian/vehicle user ethics and cooperation.

Action 2.2 Develop visitor information sites near the towns of Honeydew and Petrolia (Outside KRNCA).

Action 2.3 Utilize informational materials (maps/brochures) and other interpretive devices to direct visitor use (by area, facility or type of use) (Zone: All).

Action 2.4 Establish a junior ranger program at the visitor center for local and visiting preteens (Zone: 4 or 5).

Action 2.5 Provide naturalist-led interpretive programs (hikes, campfire talks, demonstrations, etc.) at developed campgrounds, visitor information sites and other popular areas of interest to interpret important natural and cultural features (Zone: All).

Action 2.6 Interpret forest management and lifting studies along Horse Mountain and Finley Ridge Roads (Zone 3).

Action 2.7 Design forms that encourage visitors to report wildlife observations, trail conditions, incidents and other comments (Zone: All).

Action 2.8 Develop road tour cassette tapes to interpret various natural, cultural and management features of the KRNCA (Zone: 3,4,5).

Action 2.9 Indicate on maps and post locations on the ground where turnouts have been provided for camping, picnicking or other uses (Zone: 3,4,5).

Action 2.10 Indicate availability of and means for contacting emergency services providers at contact stations, the visitor center and in maps/brochures (Zone: All).

Action 2.11 Provide both living interpretation and static interpretive signs and displays to interpret the area's pre-history and history. Enlist the help of the area's "old timers" in recording the verbal history of the KRNCA (Zone: 4,5).

Action 2.12 Through displays, brochures/maps, personal contacts and signing, inform the visiting public concerning the locations and boundaries of the WSA's and what activities and practices are allowed or prohibited (Zone: 1,2).

Action 2.13 Accept donations for otherwise free maps, brochures and interpretive programs to help defray KRNCA operating costs.

Action 2.14 Charge a fee for maps or other printed materials and for interpretive programs offered at the visitor center or at field locations (Zone: All).

b. Signs

Action 2.15 Install portal signs at all KRNCA entry points, including but not limited to Lighthouse Road, Smith-Etter Road and Shelter Cove Road (Zone: 3,4).

Action 2.16 Develop and install interpretive signs for Mattole River estuary, Punta Gorda Lighthouse, Shelter Cove tidal pools, shell mounds and other area features of cultural or natural interest (Zone: 3,4,5).

Action 2.17 Install regulatory signs wherever restrictions on visitor activities are imposed, such as at trailheads for trails closed to motor vehicles or developed recreation sites where shooting is prohibited (Zone: All).

Action 2.18 Install directional and informational signs along KRNCA roads and trails (Zone: All).

Action 2.19 Cooperate with and allow neighboring landowners to assist in boundary delineation and posting using BLM surveys and signs (Zone: All).

3. Visitor and Resource Protection

Action 3.1 Implement a visitor awareness program of low impact use of the KRNCA. This program will utilize volunteers, visitor services and law enforcement personnel, interpretive

talks, brochures and other educational materials (see Action 2.1) and will stress minimum impact camping techniques, pack-it-in/pack-it-out procedures, etc. (Zone: All).

Action 3.2 Monitor visitor use and unattended vehicles and property with Visitor Services staff in coordination with volunteer hosts and law enforcement Rangers (Zone: All).

Action 3.3 Establish BLM and/or volunteer cooperator horseback patrols for wilderness and other areas closed to vehicle use (Zone: 1,2).

Action 3.4 Require that visitors pack out all refuse that they generate during their visit to backcountry areas of the KRNCA (Zone: 1,2).

Action 3.5 Provide portable chemical toilets where needed during exceptionally heavy use periods (Zone: 3,4,5).

Action 3.6 Establish visitor use capacities based on the Zone Specific Management Objectives with priority given to coastal areas (Zone: All).

Action 3.7 Require visitors to obtain permits for using areas of the KRNCA which are receiving more than 95 percent of maximum allowable use as prescribed under Action 3.6. Phase in permit requirements, making them voluntary initially, and mandatory after a reasonable period, allowing the general public time to become aware of the permit requirement (Zone: 1,2).

Action 3.8 Provide visitor registration logs at trailheads, visitor center, and developed campgrounds for voluntary visitor monitoring assistance (Zone: All).

Action 3.9 Conduct selective inventories of important marine and terrestrial habitats for flora and fauna, develop and prescribe the Limits of Acceptable Change (LAC) and institute a monitoring program to measure the effects of activity upon these habitats (Zone: 1,2).

Action 3.10 Enlist inholders to assist with data gathering on visitor use and resource conditions for monitoring LAC.

Action 3.11 Route, reroute or close trails and roads to protect sensitive habitat areas (Zone: All).

Action 3.12 Erect physical restraints (i.e. fences, barricades) where necessary to protect sensitive habitats from visitor impacts (Zone: All).

Action 3.13 Ensure that BLM law enforcement, visitor services, maintenance and fire suppression staff advise the visiting public that private inholdings and adjoining properties exist and private property rights should be recognized (Zone: All).

Action 3.14 Protect cultural resource sites to the full extent of the law by signing, fencing, frequent patrol, and if necessary, excavation and reburial (Zone: All).

Action 3.15 Work with private property owners in the Big Flat area to limit uses which conflict with primitive recreation opportunities on surrounding public land (Zone: 1).

4. Visitor Services

a. Emergency Services

Action 4.1 Work closely with local emergency service providers to accommodate increased emergency assistance demands resulting from increased visitation to the KRNCA.

Action 4.2 Train volunteer hosts and other appropriate volunteers in basic first-aid, CPR and ensure that they are knowledgeable concerning the availability of emergency services.

Action 4.3 Train and qualify KRNCA BLM personnel in CPR, first-aid and surf rescue.

b. Law Enforcement

Action 4.4 Provide regular law enforcement Ranger patrols throughout the KRNCA (Zone: All).

5. Special Area Permits and Commercial Use Administration

Action 5.1 Implement a visitor permit system when visitor use capacities are exceeded based on the monitoring studies and visitor counts or when LAC objectives are exceeded (Zone: All).

Action 5.2 Require Special Recreation Permits (SRP) for commercial uses and events when necessary to protect the natural and cultural resources or reduce conflicts among different recreation user group types (Zone: All).

Action 5.3 Allow commercial service providers operating under BLM permit to provide suitable advertising brochures or other media for display/distribution at the visitor center and information sites.

Action 5.4 Post the requirement for Special Recreation Permits for commercial services such as hunting guides, pack outfitters, vehicle shuttles, stock or equipment rentals, etc., and allow only the types and amounts of commercial uses which would be compatible and consistent with the visitor management zoning criteria (Zone: All).

Action 5.5 Limit commercial use volume to not more than 25 percent of the total visitor use allowed in a zone under Action 5.1 if total use reaches prescribed zonal maximum use levels (Zone: All).

6. Facility Development (See Appendix B for primary services to be provided at each development.)

a. Visitor Information/Interpretive Sites

Action 6.1 Develop a staffed information site in the vicinity of Mal Coombs Park (Zone: 5).

Action 6.2 Develop a relief model of the KRNCA at the visitor center and visitor information sites depicting facilities, trails, roads and land ownership (Zone: 5).

Action 6.3 Develop visitor information sites at appropriate major entry points to the KRNCA. These could include Mattole Campground, Smith-Etter Road, Wilder Ridge/Horse Mt. Road, Shelter Cove/Horse Mt. Road and Black Sands Beach (Zone: All).

Action 6.4 Develop a King Range Visitor Center at a suitable location (Zone: 4 or 5).

b. Administrative Site Development

Action 6.5 Provide housing for seasonal BLM employees at Kaluna Cabin (Zone: 3).

Action 6.6 Expand the existing administrative site to include an office, dormitory and maintenance shop/warehouse.

c. Campgrounds and Staging Areas

Action 6.7 Develop a parking area on the bluff overlooking the existing Black Sands Beach parking lot (Zone: 5).

Action 6.8 Develop Mattole Campground to provide overnight camping, secure parking, equestrian facilities and potable water in the vicinity of the mouth of the Mattole River (site to be determined in project plan) (Zone: 4).

Action 6.9 Expand Tolkan Campground to accommodate equestrian use and develop an equestrian trailhead (Zone: 3).

Action 6.10 Ensure that facility planning and design does not inadvertently create trespass problems for private landowners.

Action 6.11 Develop a new "Honeydew Campground" along Wilder Ridge Road (concept only).

d. Sanitary Facilities

Action 6.12 Monitor potential human waste problems along the beach and other locations within the KRNCA to assess future sanitary facility needs (Zone: All).

e. Trail Development

Action 6.13 Develop a hiking and equestrian trail from Black Sands Beach north along the terrace above the beach to Gitchell Creek (Zone: 3).

Action 6.14 Develop springs for potable water sources where feasible at appropriate intervals near trails (Zone: 1).

Action 6.15 Extend Rattlesnake Ridge Trail an additional two miles to connect in with the Lost Coast Trail at Big Flat (Zone: 1).

Action 6.16 Improve the existing Buck Creek Trail to accommodate equestrian use (Zone: 1).

Action 6.17 Develop trailheads with information boards and vehicle parking at Kinsey Ridge, King Crest Trail, Lightning Trail and Lost Coast Trail (Zone: 1).

Action 6.18 Develop an equestrian oriented interpretive trail along the first few miles of one of the equestrian trails outside the WSA boundary.

Action 6.19 Reroute Bear Creek Trail (at Tolkan Campground) to reduce its average gradient and provide self-guided interpretation along it (Zone: 3).

Action 6.20 Develop a barrier free trail between Wailaki and Nadelos Campgrounds and between Mal Coombs Park and Abalone Point (Zone: 4,5).

Action 6.21 Extend the Miller Loop Trail to the end of the King Range Road (Zone: 1).

Action 6.22 Provide for hiking and equestrian use along the abandoned logging road from Horse Mt. Road (between Tolkan and Horse Mt. Campgrounds) westerly to the Lost Coast Trail at the beach (Zone: 1).

f. Other Developments

Action 6.23 Construct fences or barriers where needed to control unauthorized visitation or use from public land onto private land. Install effective barriers to preclude vehicle use within designated closed areas (Zone: All).

g. Rehabilitation

Action 6.24 Where access rights and associated roads are no longer required to reach inholder's property, rehabilitate the roads, either to serve as trails or to be totally eliminated (Zone: All).

Action 6.25 Reconstruct and restore the Wailaki and Nadelos Campgrounds to provide visitors with facilities that are safe to use, function properly and are more visually attractive than the existing facilities (Zone: 4).

h. Motorized Access

Action 6.26 Retain and implement the existing King Range Transportation Plan.

7. Staffing

Action 7.1 Establish a full time maintenance staff, capable of handling all aspects of grounds and building maintenance, construction project supervision, heavy equipment operation, water system repair and water quality testing, sign construction, road and trail construction and repairs.

Action 7.2 Provide high-visibility BLM maintenance, law enforcement, visitor services staffing (including volunteers) in the KRNCA. Increase staffing during periods of unusually heavy visitation such as holiday weekends.

8. Maintenance

Action 8.1 Prepare and implement a maintenance plan for the KRNCA. The plan will address maintenance responsibilities of visitor management personnel, volunteers, contractual services, frequency of maintenance and specific tasks to be preformed at each site (Zone: All).

9. Cooperative Agreements and Contracts

Action 9.1 Contract with the County Sheriff's Dept. for patrol services and support to KRNCA staff.

Action 9.2 Develop Cooperative Management Agreements (CMA) with user groups to help maintain those facilities, trails or areas from which these groups derive benefit.

Action 9.3 Establish a Cooperating Association to assist in operating the visitor center and to generate revenues through the sale of books, magazines, photographs, postcards, etc.

Action 9.4 Develop Cooperative Agreements with local emergency services providers to enhance their capabilities and to effectively interface with BLM's emergency services personnel.

Action 9.5 Enter into a Memorandum of Agreement with the California Department of Parks & Recreation for cooperative wilderness management for the Chemise Mt./Sinkyone area to standardize information services, trail signing, etc.

Action 9.6 Maintain the agreement with the California Department of Forestry and Fire Protection for fire protection.

Action 9.7 Continue agreement with the State Lands Commission that authorizes the BLM to manage visitor-related impacts within the tidal zone of the KRNCA.

Action 9.8 Maintain agreement with the Humboldt Bay Harbor and Recreation Conservation District for administration of Mal Coombs Park.

Action 9.9 Develop a CMA with the California Horsemen's Association for the cooperative design, construction and maintenance of equestrian facilities and for management of equestrian uses within the KRNCA.

Action 9.10 Continue to recruit seasonal and temporary employees.

10. Volunteers

Action 10.1 Establish campground host volunteer positions at developed campgrounds. Provide volunteer hosts for other developed sites during heavy use periods. Recruit from the local area for volunteers to work as campground hosts, docents and visitor contact people at the visitor center or in the field (Zone: All).

11. Special Equipment

Action 11.1 Provide effective 2-way radio communications coverage for the entire KRNCA and insure that necessary volunteers and cooperating organizations and agencies have access to the radio net.

Action 11.2 Provide volunteer visitor services staff (campground hosts, docents, backcountry patrols, etc.) with radio communications.

12. Fire Management

Action 12.1 Develop restrictions on wildfire suppression activities to protect cultural resource sites (Zone: All).

Action 12.2 Have volunteers supplement BLM staff in providing the visiting public with wildfire prevention information, emergency evacuation information and in issuing and checking compliance for California Interagency Campfire Permits.

Action 12.3 Establish an on-site seasonal wildfire suppression organization properly trained and equipped for wildland, wilderness and limited structural fire suppression actions.

Action 12.4 Prohibit bonfires (large conflagrations with flame heights excessive to the needs for a cooking or warming campfire) throughout the KRNCA (Zone: All).

Action 12.5 Maintain a wildfire suppression plan in cooperation with inholders and adjoining landowners.

Action 12.6 Post fire restrictions during periods of high fire danger (Zone: All).

Action 12.7 Require campfire permits for campfires throughout the KRNCA (excluding developed campgrounds) (Zone: All).

Action 12.8 Develop special fire suppression techniques/procedures and emergency services plans and necessary agreements to insure that fire fighting or rescue operations do not impair wilderness values (Zone: 1,2,3).

Action 12.9 Maintain natural-appearing helispots for rescue and wildfire suppression activities (Zone: 1,2,3).

Part V. Implementation Phasing and Costs

Costs include employee salaries, operating expenses, materials and contract labor expenses.

Year after plan approval (dollars shown in thousands)

ACTION	1	2	3	4	5	6	7	8	9	10
1. Land Tenure Adjustments										
1.1 Acquisition: Private landowner response unknown										
1.2 Inholdings: Dependent upon actions outside control of this plan.										
2. Information and Interpretive Services										
2.1 I & E Plan	20.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.2 Contact Sta.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.3 Dir. Use	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.4 Jr. Ranger	-	-	-	-	3.0	3.0	3.0	3.0	3.0	3.0
2.5 Naturalist	-	-	-	6.0	6.0	6.0	6.0	6.0	6.0	6.0
2.6 For. Mgmt.	-	-	-	-	-	-	-	2.0	2.0	2.0
2.7 Forms	-	-	-	-	0.5	-	-	0.5	-	-
2.8 Cassettes	-	-	-	-	-	-	5.0	5.0	.5	0.5
2.9 Turnouts	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2.10 Emer. Ser.	-	-	-	-	-	-	-	-	-	-
2.11 History	-	-	0.5	0.5	0.5	-	-	-	-	-
2.12 WSA's	2.0	2.0	2.0	-	-	-	-	-	-	-
2.13 Donations	-	-	-	-	-	-	-	-	-	-
2.14 Fees	-	-	-	-	-	-	-	-	-	-
2.15 Ent. Signs	2.0	2.0	2.0	-	-	-	-	-	-	-
2.16 Interp. S.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2.17 Reg. Signs	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.18 Dir. Signs	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2.19 Boundaries	-	-	-	-	-	-	-	-	-	-
3. Visitor and Resource Protection										
3.1 Vis. Aware	6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	9.0	9.0
3.2 Security	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0
3.3 Horse Ptrl	-	-	10.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3.4 Pack-out	-	-	-	-	-	-	-	-	-	-
3.5 Portacans	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
3.6 Capacities	-	-	-	-	-	-	-	-	-	-
3.7 Permits	-	-	-	-	-	-	-	-	-	-
3.8 Logs	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
3.9 LAC	3.0	9.0	9.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3.10 Inhold.	-	-	-	-	-	-	-	-	-	-
3.11 Reroute	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
3.12 Barriers	1.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
3.13 Advice	-	-	-	-	-	-	-	-	-	-
3.14 Protection	-	-	-	-	-	-	-	-	-	-
3.15 Big Flat	-	-	-	-	-	-	-	-	-	-

4. Visitor Services

4.1 S&R Coop.	-	-	-	-	-	-	-	-	-	-
4.2 Training	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
4.3 BLM S&R	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
4.4 Rangers	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

5. Special Area Permits and Commercial Use Administration

5.1 Hosts	-	-	-	-	-	-	-	-	-	-
5.2 SRPs	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5.3 Adverts.	-	-	-	-	-	-	-	-	-	-
5.4 Posting	-	-	-	-	-	-	-	-	-	-
5.5 Limits	-	-	-	-	-	-	-	-	-	-

6. Facility Development

6.1 Mal Coombs	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6.2 KRNCA Model	-	-	-	-	3.0	-	-	-	-	-
6.3 Con. Sta.	-	2.0	2.0	2.0	-	-	-	-	-	-
6.4 Vis. Cntr.	90.0	30.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6.5 Kaluna C.	2.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0
6.6 Ad. Site	900.0	90.0	90.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.7 Black Sands	-	50.0	10.0	2.0	3.0	5.0	5.0	5.0	5.0	5.0
6.8 Mattole C.	-	-	80.0	40.0	5.0	5.0	5.0	5.0	5.0	5.0
6.9 Tolkan C.	5.0	1.0	1.0	50.0	5.0	5.0	5.0	5.0	5.0	5.0
6.10 Design	-	-	-	-	-	-	-	-	-	-
6.11 Honeydew C.	-	-	-	-	-	5.0	80.0	5.0	5.0	5.0
6.12 Toilets	-	-	-	-	-	-	-	-	-	-
6.13 Ter. Trail	-	-	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
6.14 Springs	-	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6.15 Rattle R Tr.	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6.16 Buck Cr. Tr.		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6.17 Trailheads	-	3.0	3.0	3.0	3.0	3.0	-	-	-	-
6.18 Equestrian	-	-	-	-	-	3.0	3.0	3.0	1.0	1.0
6.19 Bear Cr. Tr.	-	-	-	-	-	1.0	1.0	1.0	1.0	1.0
6.20 Dis. Access	5.0	5.0	5.0	5.0	5.0	1.0	1.0	1.0	1.0	1.0
6.21 Miller Loop	-	-	-	-	-	6.0	6.0	1.0	1.0	1.0
6.22 Horse Cr. Tr.	-	-	-	-	-	-	6.0	6.0	1.0	1.0
6.23 Fences	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6.24 Reh. Roads	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
6.25 Reh. W&N	100.0	50.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

6.26 Trans. Plan	-	-	-	-	-	-	-	-	-	-
7. Staffing										
7.1 Maint.	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
7.2 LE-VS	200.	200.	200.	200.	200.	200.	200.	200.	200.	200.0
8. Maintenance										
8.1 Maint. Pln.	-	2.0	-	-	2.0	-	-	2.0	-	-
9. Cooperative Agreements and Contracts										
9.1 Sheriff	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
9.2 CMA-trls	-	-	-	-	-	-	-	-	-	-
9.3 Coop. Ass.	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
9.4 SAR	-	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
9.5 CA P&R	-	-	-	-	-	-	-	-	-	-
9.6 CDF&P	-	-	-	-	-	-	-	-	-	-
9.7 PLC	-	-	-	-	-	-	-	-	-	-
9.8 Har.Dist.	-	-	-	-	-	-	-	-	-	-
9.9 CHA	-	-	-	-	-	-	-	-	-	-
9.10 EDD	-	-	-	-	-	-	-	-	-	-
10. Volunteers										
10.1 Hosts	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11. Special Equipment										
11.1 Radio Cov.	-	15.0	-	-	-	-	5.0	-	-	-
11.2 Radios	-	2.0	-	-	-	2.0	-	-	-	-
12. Fire Management										
12.1 Mod. Supp.	-	-	-	-	-	-	-	-	-	-
12.2 Vol. check	-	-	-	-	-	-	-	-	-	-
12.3 Fire Crew	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
12.4 Bonfires	-	-	-	-	-	-	-	-	-	-
12.5 Plan	-	-	-	-	-	-	-	-	-	-
12.6 Post	-	-	-	-	-	-	-	-	-	-
12.7 Permits	-	-	-	-	-	-	-	-	-	-
12.8 Supp. Plan	-	2.0	-	-	-	-	-	-	-	-
12.9 Helispots	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TOTALS	1641.3	761.3		598.8		685.8		595.3		
		793.8		669.3		599.8		605.3		595.3

A. Standard Implementation Procedures

Implementation of any of the previously listed actions on Bureau administered land would be subject to existing laws, regulations, and BLM Manual specifications, and would be constrained to avoid or minimize impacts that could occur to other resources as follows:

1. A site-specific environmental analysis (EA) will be conducted prior to actual construction or treatment phase of the facilities or projects proposed. During the early scoping stage of an EA, the proposed project will, whenever possible, be modified to avoid or minimize identified potential negative impacts. The EA will document the magnitude and type of impacts of proposed development or treatment to assist in making a decision on each proposal.

2. An analysis of potential effects on listed and proposed State and Federal rare, threatened, endangered plants and animals will be required for each proposal. If needed, formal consultation with the U.S. Fish and Wildlife Service will be initiated. If any part of the proposal will have a negative impact on an officially listed threatened or endangered species, or its habitat, the project will either be modified to mitigate this impact or abandoned. Where it is not feasible to modify the project, a determination will be made as to the effects on the species (or subspecies) as a whole.

3. The BLM will meet agency responsibilities under Section 106 of the National Historic Preservation Act (as amended) through stipulations outlined in the Programmatic Memorandum of Agreement (PMOA) between the BLM and the Advisory Council of Historic Preservation dated May 15, 1986.

A Class III Cultural/Historical Inventory will be conducted prior to commencement of any development activities which involve land disturbance. Facility developments will avoid adverse effects on properties included in or eligible for inclusion in the National Register of Historic Places, unless it is not prudent or feasible. Where avoidance is not prudent or feasible, the Bureau will consult with the State Historic Preservation Officer for purposes of developing a mutually acceptable mitigation plan. Mitigation will be implemented prior to ground disturbing activities.

4. All actions will be in conformance with the management objectives as described in the King Range Management Program of 1974.

Part VI. Monitoring

A. Resources to be Monitored

The objectives of the KRNCA Visitor Services Plan are specified by Visitor Management Zone (VMZ) as shown in Part IV-B. of the plan. These objectives require that the physical, social, and managerial environments within each VMZ combine to create an "experience opportunity" which is consistent with the management objectives for the VMZ. BLM planning combined with the environmental assessment process insures that direct BLM management actions involving resource and/or use modifications, whether by BLM or authorized public land users, will conform to the management objectives and not jeopardize the experience opportunity specified

for the particular VMZ. In order to insure that public uses or BLM management actions do not result in a cumulative change which violates the objectives for each zone, potential agents of such a change must be identified and Limits of Acceptable Change (LAC) must be specified for each VMZ. In the KRNCA, the condition of natural and cultural resources, as well as the perceptions of the visiting public and agency staff, can be monitored to determine how well the management program is meeting the objectives of the Visitor Services Plan.

B. Change Agents and Indicators Requiring Monitoring

1. Agents of Change

Apart from naturally occurring phenomena such as lightning-caused wildfire, earthquakes, landslides and weather, the only agent of change which is not under the direct management control of the BLM is the general public (including neighbors and inholders). Direct agency control of the public is generally not a desirable or necessary goal and would, in and of itself, violate the area's management objectives in most cases. However, the visiting public can affect the desired experience opportunity in a VMZ in three basic ways; either through excessive user density, by pursuing activities or using technologies which are inconsistent with the setting, or by modifying the physical environment in such a way that the zone objectives are violated.

2. Indicators of Change

a. Visitation Increases - Increases in general visitation, if they occur during the traditionally heavy use season and are sustained over time may signal that the area's overall carrying capacity, as determined by the VMZ criteria, is being approached.

b. Activity Preference Shifts - The existing and planned mix of developed and undeveloped sites will accommodate the traditional distribution and numbers of visitors engaged in recreational activities. A significant shift in activity preferences could overload some sites and/or create conflicts between competing activities within sites or areas.

c. New Technologies - The advent of new technologies or new applications of technologies can create unanticipated impacts to both social and physical environments. Past examples are off-road vehicles, hang gliders, motorhomes, "boom boxes" and styrofoam containers.

d. Resource Dependent Businesses - The advent of outfitter and guide service businesses which depend on the use of public land resources can create increased pressure on the social and physical settings by drawing visitors who would not otherwise consider visiting the area.

e. Economic Factors - Changes in the distribution of wealth or in the price of goods and services can lead to increased travel and visitation as occurs when gasoline prices fall. Another example is the increased incidence of fuelwood theft from public land when heating fuel prices rise.

f. Demographic Shifts - Changes in the cultural make-up of visitors can place new demands upon resources and facilities. An increase in non-English speaking visitors could lead to

increased non-compliance problems due to misunderstanding of spoken or printed rules, regulations, and directional information.

g. Environmental Factors - Changes in environmental conditions, both within the area and outside it, can have a substantial impact upon use levels. Unseasonably wet weather could result in hikers or equestrians damaging trails which would withstand use under normal weather conditions.

C. Limits of Acceptable Change

Both the physical and social settings, consisting of the measurable criteria under the VMZ objectives for each zone, need to be monitored to insure that visitor use is consistent with the VSP. Monitoring is accomplished by establishing thresholds for measurable resource conditions. These thresholds represent the limits of acceptable change or LAC.

1. Visitor Management Zone 1

a. Physical Setting Criteria Thresholds

1. Visual or audio intrusions must not be allowed in the foreground and middle-ground.

2. Irreversible evidence of man will not occupy more than one percent of the area.

3. No air, water and/or noise pollution.

4. The natural environment will be essentially unmodified.

5. Only facilities essential for resource protection and visitor safety will be provided. No facilities are provided for visitor comfort or convenience. Facilities will be constructed only from on-site materials.

b. Social Setting Criteria Thresholds

1. Group spacing is informal and dispersed to minimize contact frequency. There is very little evidence of other visitors.

2. Frequency of contact is very low (1-2 parties per day at commonly used sites).

3. User density does not exceed from one person per 40 densely wooded acres to one person per 500 acres in wide open areas.

2. Visitor Management Zone 2 and 3 (VMZ 3 differs from VMZ 2 only in that motorized uses may be encountered in VMZ 3. Motorized uses are not allowable in VMZ 2)

a. Physical Setting Criteria Thresholds

1. Visual or audio intrusions must not occur in the foreground or middleground from other than recreational use.

2. Irreversible evidence of man must not occupy more than 5 percent of the area.

3. Air, water and/or noise pollution must not exceed low intensity and frequency of occurrence.

4. A predominately natural environment must be maintained. No more than 70 percent of the area may contain subtle resource modifications. No more than 3 percent of the area may contain obvious resource modifications. This includes the sum total of both public and private land within the area.

5. Facilities may be provided for resource protection and visitor safety. Construction is from on-site materials where possible.

b. Social Setting Criteria Thresholds

1. Formalized group spacing may be used to disperse use. Evidence of others is observable.

2. Frequency of contact with other users is low to moderate (5 parties per day).

3. User density does not exceed a range of from one person per 12.5 acres in uneven, densely wooded areas to one person per 100 plus acres in wide open areas.

3. Visitor Management Zone 4

a. Physical Setting Criteria Thresholds

1. Visual intrusions must not occur within the foreground.

2. Irreversible evidence of man must not occupy more than 25 percent of the area.

3. Air, water and/or noise pollution must not exceed moderate intensity and frequency of occurrence.

4. A predominately natural environment must be maintained. Modifications may be evident but must be harmonious with the natural environment. No more than 70 percent of the area may contain subtle resource modifications. No more than 25 percent of the area may contain obvious resource modifications. This includes the sum total of both public and private land within the area.

5. Facilities may be provided for user convenience, safety, resource protection and/or to enhance recreation opportunities.

b. Social Setting Criteria Thresholds

1. Moderate evidence of the sights and sounds of man which are usually harmonious with the natural environment.

2. Frequency of visitor contact is moderate at developed sites; low to moderate away from developed sites.

3. User density does not exceed one person at one time per acre overall.

4. Visitor Management Zone 5

a. Physical Setting Criteria Thresholds

1. Irreversible evidence of man may occupy up to 50 percent of the area.

2. Air, water and/or noise pollution must not exceed moderate in intensity or frequency.

3. Substantial resource modifications to enhance recreation activities and to maintain soil and vegetative cover may be evident.

4. Facilities may be provided for specialized uses and to accommodate large numbers of visitors. Facilities are provided for intensive motor vehicle use and parking.

b. Social Setting Criteria Thresholds

1. Sights and sounds of man are readily evident.

2. Frequency of contact with other visitors is moderate to high.

3. User density ranges from one to eight persons per acre at one time.

5. Triggers for Management Concern and Action

If any of the physical or social setting criteria thresholds are approached, management concern would be appropriate. If any of the thresholds are exceeded (exclusive of unusual "shock" events such as an unusually heavy July fourth holiday weekend), then corrective management action should be triggered. Not all corrective management action possibilities can be foreseen, however, readily available actions such as restricting commercial use, rescheduling use, requiring permits or closing certain areas to certain types of uses could be considered.

D. Monitoring Methodology

1. Mechanisms

There are six tools which BLM uses to monitor visitor use and resource conditions. These are listed below:

a. Patrol Logs

Visitor services and law enforcement personnel perform regular patrols throughout the KRNCA. Observations of numbers of visitors, activities and violations of rules are recorded on the patrol logs which arecompleted on a daily or per patrol basis. These logs are then reviewed by the supervisor and provide an immediate record of visitor use and resource problems.

b. Site Monitoring Reports

Selected sites are periodically monitored using photographic and other recording methodologies for comparative purposes. Monitoring reports based upon these observations are compiled annually and used by resource management specialists to recommend corrective actions.

c. Campground Permit Fee Envelopes

Fee envelopes provide information concerning numbers of visitors, primary recreational activities, place of origin and duration of visit. This information is voluntarily supplied by the visitor.

d. Special Recreation Permits (SRPs)

SRPs for commercial, competitive and special area uses or events provide information on party size, frequency of use, activities, facilities used or provided, duration of use and any incidents or problems encountered by the permittee. They also provide a direct feedback mechanism to administering BLM personnel concerning the condition of the resources and facilities during routine compliance checks and post-use reports.

e. Traffic Counters

Traffic counters provide gross data on vehicular traffic when no agency personnel are present to record observations.

f. Correspondence, Telephone Inquiries and Complaints

Some of the most useful information concerning visitor use and resource conditions is volunteered by the general public in the form of letters, telephone calls, personal contacts with agency personnel and volunteers, inquiries and complaints. Often this

sort of information takes the form of a request for a special service or a complaint about a situation the visitor encountered and wishes to see resolved.

2. Data Collection

Data collection is an integral part of virtually all resource and visitor management activity, and occurs on a daily basis with routine law enforcement and visitor service patrols, as well as constantly through various off-site contacts with the public. Cultural resource sites and sensitive habitat areas are monitored periodically and reported at least annually unless damage is occurring, in which case monitoring would be increased.

3. Data Analysis

Patrol logs and fee envelope data are reviewed on a daily basis by the program leader. Any unusual deviation in a change agent should be noticed. Also, the perceptions of visitor services personnel and volunteers are taken into account as they report their observations.

During the annual compilation of use records for the Recreation Management Information System (RMIS) report near the end of each fiscal year, use levels, activity preferences and trends are compared to prior year records and effects of visitor use on planned carrying capacities as defined by the VMZ objectives are assessed. Subtle changes in visitor use become apparent during this analysis process.

E. Thresholds Triggering Management Concern

The following thresholds which can be identified through monitoring can serve as indicators that the planned visitor use capacities and uses are being violated and may require corrective management actions.

1. Visitor Management Zone Use Levels

When or if use levels exceed the prescribed levels (more people at one time per acre than specified above) for a visitor management zone.

2. Resource Alteration/Damage

Visitor caused resource alteration can take many forms. Some of the most common indicators of this situation include such things as vehicles parked along narrow roadways or atop natural vegetation because developed parking spaces are unavailable. Noticeable quantities of human waste near sites which have sanitary facilities, compacted ground in backcountry campsites and damaged vegetation in places where evidence of use was previously absent are also common indicators.

It is important that the sources of resource damage be identified by direct observation if possible so that over-use can be distinguished from deliberate illegal activity such as vandalism.

3. Visitor Conflicts

One of the most compelling indicators that planned uses have exceeded the designed use capacity is evidence of conflict between previously tolerant visitors. Conflict may occur between visitors pursuing the same type of experience as well as between visitors seeking different experience opportunities. Conflict usually is the result of one or both involved visitors having their expectations interfered with by the other.

4. Permittee Complaints

When a resource dependent activity is permitted by BLM and it is nearing its carrying capacity (usually determined by a perceived shortage of a certain resource), permit holders will often demand that limitations on use be imposed by BLM action. Care must be exercised to insure that activity competition rather than resource depletion or actual crowding is not the principal motivation for permittee complaints.

F. Use of Monitoring Data

Monitoring data is used to compile reports, as previously noted, and to identify problems as well as opportunities to improve management of the KRNCA. The data is also used to amplify budget requests and support resource use and visitor management recommendations. Additionally, in reviewing the impact of proposed resource management actions, monitoring data can often provide quantifiable comparisons for alternative selection.

Most importantly however, monitoring provides the means for measuring the success or failure of both planned actions and the day-to-day operations for which the BLM is responsible within the KRNCA.

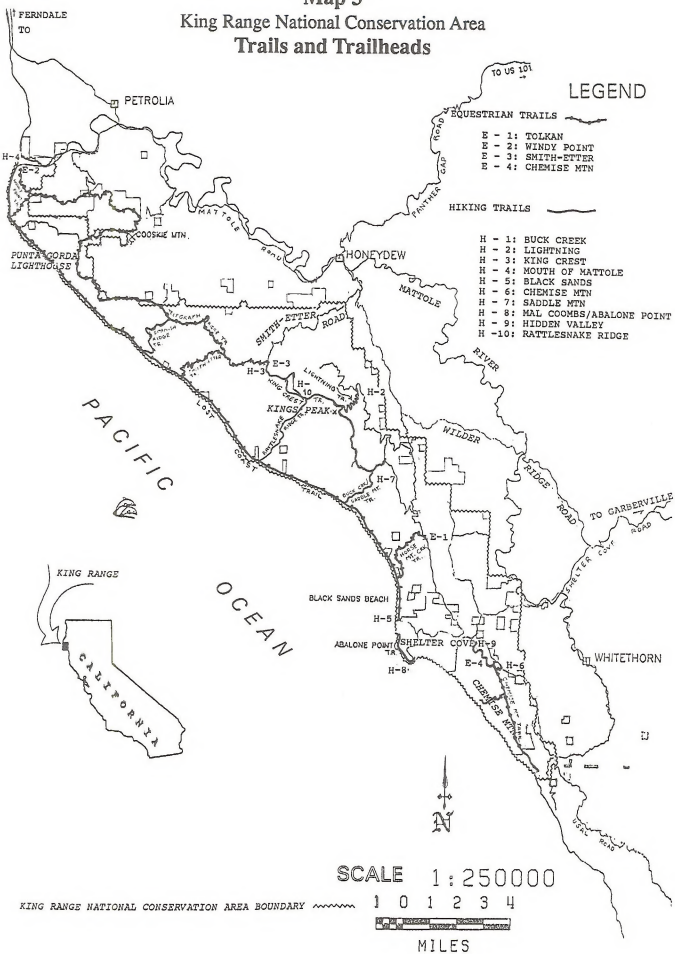
Appendix A. Concept Plan for Trail Developments (Map 3)

	Trail Name	Primary Use Design Standards
1.	Chemise Mountain Trail	Hiking, Equestrian
2.	Abalone Point Trail	Hiking (Accessible)
3.	Lost Coast Trail	Hiking, Equestrian
4.	Horse Mountain Trail	Hiking, Equestrian
5.	Buck Creek Trail	Hiking, Equestrian
6.	King Crest Trail	Hiking
7.	Rattlesnake Ridge Trail	Hiking
8.	Spanish Ridge Trail	Hiking, Equestrian
9.	Miller Loop Trail	Hiking
11.	Lightning Trail	Hiking
12.	Nature Trail	Hiking (Accessible)
13.	Bear Creek Trail	Hiking, Equestrian

Map 3

King Range National Conservation Area

Trails and Trailheads



Appendix B. Concept Plan for Recreation Facility Developments

TYPE	NAME OF FACILITY	PRIMARY SERVICES PROVIDED
Equestrian Trailheads		
	Tolkan Trailhead	a,b,c,d,e,f,g,h
	Windy Point Trailhead	a,d,h
	Smith-Etter Trailhead (concept only)	a,d,h
Hiking/Equestrian Trailheads		
	Buck Creek Trailhead	d,h
	Lightning Trailhead	a,c,d,h
	King Crest Trailheads	a,c,d
	Lost Coast Trailheads	a,b,c,d,e,f,g,h,i
	Chemise Mountain Trailhead	a,b,c,d,f,g,h,i
	Spanish Ridge Trailhead	d
	Horse Mountain Trailhead	d
Developed Campgrounds		
	1. Wailaki/Nadelos Campgrounds	a,b,c,d,f,g,h,i
	2. Tolkan Campground	a,b,c,d,e,f,g,h
	4. Horse Mountain Campground	a,b,c,d,f,h
	5. Mattole Campground	a,b,c,d,e,f,g,h,i
	6. Honeydew Campground	a,b,c,d,e,f,g,h,i

Facilities Key

Primary Services Provided

a. parking
b. sanitary (toilets)
c. trash collection
d. information (directional, educational and/or administrative)
e. Corral (equestrian)
f. Overnight Camping (single family)
g. Overnight Camping (Group)
h. Water
i. Host

King Range Administrative Site

Residences Single Family
Dormitory
Temporary (Seasonal staff)
Warehouse
Shop
Vehicle Storage
Office/Visitor information site
Fuel Storage/vehicle service
Communications
Wareyard (uncovered storage)

Kaluna Cabin

Residence (seasonal or permanent)
Vehicle Storage

Visitor Information Site

Interpretive displays
Informational materials dispensers
Orientation map
Vehicle parking

Appendix C. Interpretive Services Concept Plan (Map 4)

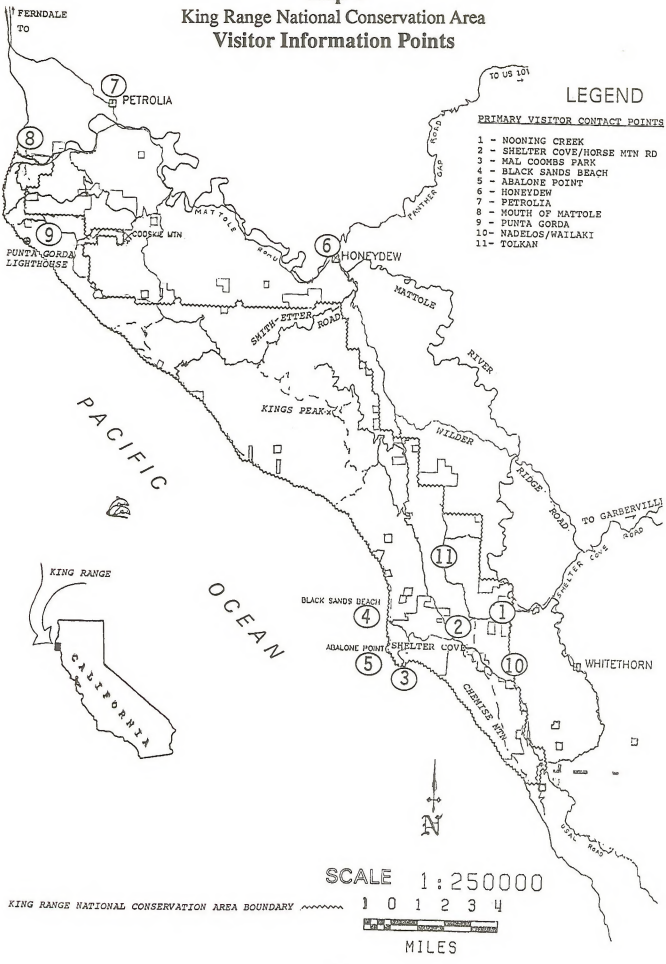
SITE NAME	MAJOR THEME	METHOD
1. Shelter Cove/ Horse Mt. Road Intersection	Orientation Coastal Viewing Hiking Information	Directional Signs Overlook Maps/Brochures
2. Mal Coombs Park	Tidal Zone Marine Biology Cultural History	Interpretive Walk Kiosk/Panals/Display
3. Black Sands Beach	Beach/Coastal Info. Low Impact Camping Low Impact Vehicle Use Rules/Regulations Permit Requirements	Kiosk Signs Maps/Brochures
4. Abalone Point	Tital Zone Marine Biology Cultural History	Interpretive Walk Panels
5. Honeydew Information Site	Orientation Emergency Services Commercial Services (Shuttles, etc.)	Maps/Brochures
6. Petrolia Information Site	Orientation Emergency services Commercial services (Shuttles, etc.)	Maps/Brochures
7. Mattole Campground	Mattole Estuary Cultural History Beach/Coastal Info. Low Impact Camping Permit Requirements Rules/Regulations	Kiosk Displays Signs Maps/Brochures
8. Punta Gorda	Lighthouse History	Panel

9. Wailaki/Nadelos Campgrounds	Rules/Regulations Ancient Forests Sinkyone Info.	Host Interp Maps/Brochures Kiosk
10. Tolkan Campground	Rules/Regulations Equestrian Info.	Maps/Brochures Kiosk
11. Horse Mountain Campground	Rules/Regulations	Maps/Brochures Kiosk
12. Trailheads	Low Impact Camping Trail Info.	Signs Maps/Brochures
13. Honeydew Campground	Rules/Regulations Fisheries	Kiosk Panel Maps/Brochures

Map 4

King Range National Conservation Area

Visitor Information Points



Appendix D. Environmental Assessment

Introduction

The King Range was established by the Congress as the nation's first National Conservation Area in 1970. The Bureau of Land Management (BLM) completed a management plan in 1974. In the intervening years, emphasis was placed on adding some 25,000 acres of acquired private land to the existing 30,000 acres under public ownership in 1970. As the King Range became better known to the public, use of the area has increased. Except for aggressive land acquisition, few of the 1974 management plan actions have been accomplished.

The Federal Land Policy and Management Act (FLPMA) of 1976 directed BLM to inventory public land to determine if they were suitable for inclusion in the National Wilderness Preservation System (NWPS). Approximately 20,500 acres of the King Range and an additional 4,143 acres of Chemise Mountain have been recommended as suitable for wilderness designation.

Because of the increased use and interest in the King Range, the BLM decided to prepare a Visitor Services Plan, and started that process in 1990. This environmental assessment will address proposed actions to determine what impacts they may have, and identify, if necessary, mitigating measures to assure the integrity of the area's natural resources and to ensure that no proposed action will impair the area's wilderness characteristics.

This activity plan is in conformance with the King Range Management Plan of 1974. Only actions that will not impair the area's suitability as wilderness will be implemented. All actions within wilderness study areas will conform to the Bureau's Interim Management Policy and Guidelines for Lands Under Wilderness Review as updated in 1987.

Proposed Action and Alternatives

Proposed Action

The Proposed Action is to implement those actions listed in Part III - The Management Plan of the KRNCA Visitor Services Plan. The management plan includes 96 individual management actions designed to provide resolutions to the 24 major issues and considerations (see Part II) developed with and through public participation in the planning process. For each major issue, a set of possible resolutions or management actions were identified. From the possible management actions, a set of actions which in combination best resolved the issues were selected.

The management plan includes actions which represent changes in degree, approach to and intensity of the BLM's recreation management direction or policy within the KRNCA, and identifies the support facilities, staffing, cooperating relationships, and other actions needed to implement the plan.

Alternatives

1. Wilderness Alternative

Under the Wilderness Alternative no action affecting any of the public land within the two Wilderness Study Area's (see Map 2), other than actions (such as staffing, land acquisitions, road rehabilitation, use capacity limitation, establishing limits of acceptable change and monitoring) which would enhance management of that area as a designated wilderness area, would be implemented until after Congressional wilderness designation occurs. Such delayed or prohibited actions would include road maintenance, new trail construction, development of trailheads, spring development, upgrading the Mattole Campground, a vehicle barricade at Gitchell Creek and maintenance of existing helispots. After wilderness designation occurs, a specific wilderness management plan will be written to address the actions that would be precluded under this alternative.

2. No Action Alternative

Under the No Action Alternative the KRNCA Visitor Services Plan would not be implemented and BLM management activities would only need to be consistent with the 1974 King Range Management Program and the 1984 King Range Recreation Activity Management Plan. Many of the management actions identified in these two plans have either been implemented or considered no longer viable. Other more realistic projects are listed below:

1. Construct a day-use picnic area and scenic overlook at Nooning Ground along Shelter Cove Road.
2. Repair and upgrade the existing Black Sands Beach Parking Area.
3. Develop hiking trails from the Shelter Cove Lots to the tidepools.
4. Develop new loop trails within the Honeydew Creek watershed.
5. Develop a trail around Point No Pass.
6. Provide vehicle access from Mattole Campground to Punta Gorda.
7. Improve the Landergen Tie Road (connects Wilder Ridge Road to the King Range Road) for public vehicle use.
8. Remove old, unmaintained barns, sheds, corrals and other structures along the beach.

Affected Environment

The Recreation Management Situation

The KRNCA contains a wide range of natural resource based recreation opportunities. The BLM describes recreation opportunities using the Recreation Opportunity Spectrum (BLM Manual Part 8320) which applies a set of criteria to a land area's physical, social and managerial settings to describe the existing conditions which in combination define a land area's capability and suitability for providing a particular range of recreational experience opportunities. The KRNCA contains five of the six ROS settings, lacking only the Urban Class or urban recreation activity opportunities (i.e. spectator sports, ice-skating, court games, swimming pools, etc.). Most of the KRNCA provides Primitive and Semi-Primitive recreation opportunities such as

hiking, camping, backpacking, nature study and so on. The total existing public land acreage within the KRNCA represented by each of the ROS Classes is as follows:

ROS CLASS	ACREAGE
Primitive	19,313.33
Semi-Primitive Non-Motorized	11,086.26
Semi-Primitive Motorized	23,959.57
Roaded Natural	1,176.43
Semi-Urban	40.89

General recreation activities include hiking, backpacking, off-road vehicle riding, fishing, camping, sightseeing, surfing, hunting, mountain bicycling and horseback riding. Total recreation use is estimated to be 87,000 visitor days per year. Approximately 50% of use is for hiking, backpacking and other non-motorized/non-facility dependent recreation.

Roads provide motorized access into portions of VMZ 3,4, and 5. Both motorized use off roads and hiking off trails is severely limited by steep terrain and heavy vegetation over much of the KRNCA; the exceptions being the grassland areas in the northerly portion of the area and the beach.

Three miles of beach between Shelter Cove and Gitchell Creek are open to off-road vehicle use. This beach area receives an estimated 4,500 visitor days use per year. The remaining 26 miles of beach (Lost Coast Trail) is closed to motorized vehicle use.

The 16-mile King Crest Trail provides foot and horse access along the main coastal ridge north of Shelter Cove. Other trails include the Lightning Trail (3 miles), Spanish Ridge Trail (3 miles), Buck Creek Trail (3 miles) and Chemise Mt. Trail (2 miles). Nearly 80% of the non-motorized use in the KRNCA occurs along the beach.

Developed recreation facilities include Wailaki Campground (2,370 visitor days/year), Nadelos Campground (558 visitor days/year), Tolkan Campground (360 visitor days/year), Horse Mt. Campground (477 visitor days/year), Mattole Campground (3,300 visitor days/year) and Mal Coombs Park (5,760 visitor days/year).

The KRNCA was evaluated for its wilderness resources in the California Statewide Wilderness Study Report, 1990. This study finds that portions of the KRNCA totaling 24,660 acres are suitable for inclusion in the National Wilderness Preservation System.

2. Visual Resources

The BLM's Visual Resource Management (VRM) System rates the KRNCA landscape as having high scenic quality along the coastline and the Mattole River Valley. The upland areas are only slightly less distinctive and overall are rated as having high to moderate scenic quality. Views range from intimate foreground to backgrounds of splendid vistas. Viewer sensitivity toward the area is high.

The VRM system establishes management classes that set standards for maintaining the visual resources. The entire coastline is designated VRM Class 2, which precludes management activities which would be evident intrusions in the characteristic landscape. The Mattole River Valley and the east slope are managed as VRM Class 3, which allows management activities to be visible, but they must remain subordinate to the existing landscape.

3. Vegetation

Broadly speaking, the KRNCA falls within the Pseudotsuga menziesii province of the temperate mesophytic forest region. Specifically, the area is composed of four plant communities: mixed evergreen forest, coastal prairie, manzanita/ceanothus chaparral and northern coastal scrub. In addition, there is the Mattole dune system at the mouth of the Mattole River.

The vast majority of the KRNCA (37,000 acres) is dominated by the mixed evergreen forest, inclusive of its hardwood seral stages. It is best described as the north coast range phase of the Pseudotsuga-hardwood forest (Sawyer et al. 1977). This plant community forms a very complicated vegetation mosaic with the coastal prairie to the north and west and manzanita/ceanothus chaparral on the more xeric sites to the south and east. Although the nature of the grassland-hardwood-conifer mosaic is not well understood, it is known that it has been shaped by a long history of fire, grazing and, more recently, logging. This is in addition to the more mundane causal agents of climate and topography.

Douglas-fir dominates the overstory in the climax situation with tan oak commonly forming a secondary canopy in the understory. Other understory species include madrone, deciduous and live oaks and California huckleberry. A typical successional overview in Honeydew Creek watershed shows old-growth Douglas-fir in the drainages and north slopes with an elevation transition through tan oak and madrone and finally progressing to a ridgetop community of manzanita.

The coastal prairie (about 4,000 acres) is an important component of the KRNCA. It is complex due to the varying degrees of successional transition away from its pristine state. In the extreme northwest, the bluffs above the mouth of the Mattole River support a mix of native perennial grasses such as California oatgrass, seacliff bluegrass and pacific reedgrass, as well as introduced perennials (e.g., velvet grass and hairy oatgrass) and introduced annual genera common throughout cismontane California.

The coastal prairie continues along the western slope of the KRNCA to Big Flat as a discontinuous mosaic periodically interrupted by northern coastal scrub and mixed evergreen forest. As one travels inland and upward, remnant indigenous perennials are reduced to isolated pockets such as the Idaho fescue populations on Spanish Ridge. Introduced annuals dominate the xeric grassland sites and introduced perennials occupy the mesic sites not taken by mixed evergreen forest.

The fourth major plant community is manzanita/ceanothus chaparral which totals about 6,000 acres. It is found mainly on inland sites where soil moisture regimens are too dry to support mixed evergreen forests.

Within the KRNCA there exist several significant botanical resources:

1. The Mattole dune system is of high ecological significance. It is unique in that the aggressive introduced European dune grass (Ammophila arenaria) has not yet encroached on the Mattole dunes as it has on most coastal dunes north of San Francisco. Beach layia (Layia carnosa) is a small annual member of the sunflower family that inhabits "backdune" habitats in this dune system. It has been listed as endangered by the U.S. Fish and Wildlife Service.

2. The leafy reedgrass (Calamagrostis foliosa) found on rocky outcrops in the coastal scrub community, is another botanical resource. This species is a U.S. Fish and Wildlife Service candidate for listing as threatened, and is designated as rare by the State of California.

3. Remnants of the once ubiquitous, unaltered coastal prairies are a special botanical value. Isolated stands of such species as California melic and Idaho fescue in today's coastal prairie provide an important window into California's floristic past.

4. Within the KRNCA are approximately 1,500 acres of old-growth Douglas-fir forest located in the Honeydew Creek watershed. The old-growth forests provide us with an opportunity to observe the pristine ecosystem. These forests not only support old-growth dependent animal species but promote regional biological diversity, conserve plant and animal genetic stock and provide opportunities for scientific research.

4. Range Resources

The KRNCA includes approximately 11,110 acres of grazing leases that provide 2,490 animal unit months (AUMs) of forage for domestic livestock. Four active grazing leases occur within the area. Extant range improvements consist of approximately ten miles of fencelines, four barns and associated corrals, five enclosures, twenty utilization cages, and four water troughs. Grazing activity is limited to the northern half of the KRNCA.

The grasslands of the King Range have been ranched for over a century. Grazing on Federal land was not authorized within this area until 1983 because land that was in public ownership prior to 1983 was so scattered that it was not manageable for livestock grazing use. Since 1983 much of the land that has been acquired by BLM has been determined to be suitable for livestock grazing under the principles of multiple use management.

5. Fish and Wildlife

The general vicinity of the KRNCA contains a unique mixture of terrestrial and marine habitat, supporting a wide diversity of animal species. Offshore rocks, kelp beds, and tidal areas are inhabited by seals, sea lions, and a variety of marine birds and play a major role in the life cycle of a variety of fish species. The terrestrial Douglas-fir forest and coastal chaparral habitat types support populations of black-tailed deer, black bear, quail, blue grouse, and a wide variety of non-game birds and mammals such as mountain lion, bobcat and coyote. A reintroduced herd of Roosevelt elk spends part of its time in the KRNCA. Numerous raptors and a variety of fur-bearers such as river otter and mink inhabit the area. Several threatened or endangered wildlife

species have been observed in the area, including the brown pelican, bald eagle, northern spotted owl, northern stellar sea lion and Peregrine falcon.

The Mattole River and its tributaries provide spawning and rearing habitat for wild stocks of steelhead, coho salmon, and chinook salmon. Approximately 80 miles of the streams within the KRNCA contain sufficient habitat to support anadromous fish populations. Resident fish species include sculpin and rainbow trout. Lampreys migrate into some of the area's streams and nests have been observed in Honeydew Creek.

The Mattole Estuary, with its quiet waters and alder/willow riparian thickets, provides protection from winter storms for many species of migratory birds.

The intertidal zone between the Mattole River and Whale Gulch was designated as an Area of Special Biological Significance (ASBS) by the California Water Resources Control Board.

6. Geology/Mineral & Energy Resources

A Mineral Resource Potential Report was prepared by the U.S. Geological Survey and the Bureau of Mines for the KRNCA to identify energy and mineral resources. The report states that the potential for economic development of energy-related or metallic mineral resources is low to moderate. No oil or gas seeps or coal seams were detected. Low porosity and permeability of the Franciscan sandstones which underlie the area indicates a very low potential for oil and gas. The geothermal resource potential of the area is also low.

Minor manganese resources occur near Queen's Peak. The manganese forms small stratabound deposits associated with radiolarian chert and pillow basalt. The known deposits are too small and the manganese too low in concentration for further economic exploitation. Similar manganese mineralization may occur within a belt of melange in the southwest corner of the King Range and Chemise Mt. but economic deposits are unlikely.

Geologic and geochemical field data indicate almost no gold potential and low potential for lead, zinc, copper, and silver.

Currently there are 14 lode claims within the KRNCA. These were filed in 1982 and are located near Queen's Peak.

The KRNCA provides a case study in erosional dynamics. The severe and persistent erosion includes dissection due to youthful, steep gradient coastal streams and mass wasting (slumps and slides). The primary reason for such widespread erosion is the orogenic uplift of this section of the coastline due to tectonic plate movement. The KRNCA is situated on the leading edge of the North American Plate, which in its westerly movement grinds over the Pacific Plate, intensively fracturing bedrock as it lifts skyward. The crushed, steep, King Range is subsequently eroded by gravity and running water. High annual rainfall and incessant coastal wave action exacerbate the situation on the coast. Rainfall and land use activities exacerbate erosion inland.

Along the coastline wave-cut terraces can be identified. These terraces have been preserved by episodic uplift. Radiocarbon dating reveals that the shoreline has risen some 66 feet over the last 6,000 years.

7. Lands

Land ownership within the KRNCA is a mixture of private and public land. Approximately 55,576 acres are public and 7,635 are private.

There are no Federal Energy Regulatory Commission withdrawals within the KRNCA; the only withdrawal being the KRNCA itself, which was established by Act of Congress October 21, 1970 (Public Law 91-476). There is one active mining claim located on the Queen's Peak Mine (T.4S., R.1E., Section 34).

The following rights-of-way have been issued for roads: CA 19386 for 40' and CA 13757 for 50'. Right-of-way CA 17939 was issued for a water tank. BLM has reserved rights-of-way for roads within the KRNCA (CA 8333 for 10' and 50' and CA 3091 for 100'). BLM has acquired the following road easements within the KRNCA: CA 14666, CA 19649, CA 20166, CA 3828, CA 2647, CA 4031, CA 3622, CA 3092, CA 1904, and CA 2735.

8. Cultural Resources

The KRNCA has 121 recorded prehistoric and ethnographic sites of which 62 are located along the coastal strand from the Mouth of the Mattole River to Shelter Cove with remains of ethnographic villages, campsites, shell middens, and lithic workshop areas ranging in size from 155 square feet to over six acres. The coastal sites cover a period of time from contact with Euroamericans in the 1800's back 3,000 years. Some interior prehistoric sites may date back 6,000 years or more. In addition, there are many unrecorded historic properties such as cabins, sheds, corrals and fences, several homesteads from the 1800's and shipwreck remnants. The Punta Gorda lighthouse, a National Register landmark, is also located on the coastal strand.

The KRNCA has been the focus of several field investigations which indicate the coastal strip contains prehistoric archaeological values of national significance (see references).

From ethnographic reports (Goddard 1929; Merriam 1976; Nomland 1935; Baumhoff 1958) we know the aboriginal peoples were Athapaskan speakers comprised of two distinct groups: the Mattole and what is now known as the Sinkyone. The Mattole had two subgroups with the Cooskie (kooske) Mattole subgroup's territory from Cooskie Creek to Spanish Flat and the Mattole Indian subgroup from the drainage at what is known as the Mackey Cabin north to Davis Creek. The Sinkyone were also divided into subgroups with the Lolangkok Sinkyone holding the inland territory north of Ettersburg to Scotia and east to Phillipsville and the Shelter Cove (Tochobekeah, etc.) Sinkyone holding the territory from Spanish Creek along the coast to Usal and inland including the Garberville area.

Environmental Consequences

Proposed Action

Land Acquisition - The use of adjoining private property by visitors is a serious source of conflict and is aggravated by the fact that many visitors assume the entire KRNCA is in public ownership. When confronted by private landowners, visitors may react inappropriately because they suspect their rights are being violated. By actively acquiring easements and private land where persistent visitor trespass occurs, this conflict will be eliminated and the BLM will be able to manage the area more effectively. Acquiring private inholdings from willing sellers also minimizes the potential that non-conforming uses might occur.

Information and Interpretive Services - Interpretation is the link between visitors and the natural, cultural and backcountry values they encounter within the KRNCA. Considering the number of people that will annually visit this area, interpretation will be an effective means by which the BLM can convey information. Interpretation will go a long way toward changing attitudes and providing the visitor with insight of their actions on the environment.

By providing a range of both active and passive opportunities for visitors to better understand the natural and cultural features of the KRNCA along with the management programs for protecting those features while enhancing recreation experiences, many of the problems which affect the resources, neighboring landowners, the managing agency and the visitors themselves can be reduced or eliminated. The potential for visitors unintentionally harming the resources and other peoples' property, rights or enjoyment of the KRNCA can be significantly reduced.

A comprehensive sign installation and maintenance program will provide visitors with much of the information they need to have for safe and enjoyable visits to the KRNCA, particularly when contact with BLM staff is either not possible or not desired.

Visitor and Resource Protection - By conducting more inventories and monitoring of the area's flora and fauna, increased knowledge can be used to determine the significance of resource values and the degree by which these natural resources are able to withstand the impacts of human use. Developing the LAC prescriptions will also help to measure the effects of visitor activities on sensitive habitat areas and help to prevent the potential for resource damage. Erecting fences or other barricades where necessary to restrict human use will help to protect significant resource values, but will have a slightly negative visual impact on the area's naturalness. Requiring visitors to pack out any refuse they generate during their visit and providing portable chemical toilets where needed during exceptionally heavy use periods will reduce littering, improve sanitary and health conditions, and enhance the landscape scenery.

Visitor Services - The existing local emergency service providers are sometimes overtaxed due to visitor-related problems in the KRNCA. By strengthening these organizations and increasing the BLM role in providing emergency services, response time and effectiveness can be substantially enhanced. Providing regular law enforcement Ranger patrols throughout the KRNCA will help to minimize illegal activities that oftentimes cause resource damage, conflicts between different recreation user group types and vandalism to facilities. An increased on-the-

ground BLM presence will provide more contact with the visiting public, and questions about rules, regulations, and other information can be more readily disseminated.

Special Area Permits and Commercial Use Administration - Establishing maximum visitor occupancy levels for areas as well as facilities provides one of the most basic ways of ensuring that the social environment (type and amount of contact between visitors) does not detract from the quality of visitor experience opportunities or put excessive use pressure on facilities and natural resources. By providing the opportunity for commercial service businesses to operate in the KRNCA, visitor needs, demands and expectations can be fulfilled. Such businesses will be controlled using the BLM Special Recreation Permit system.

Facility Development - There will be many positive impacts resulting from the construction of new facilities and the restoration and repair of existing facilities. At the existing administrative site, the new office/visitor information site will provide a focal point for administrative functions specific to the KRNCA and will serve as a central location for visitors to obtain information about the area's resource values, recreation opportunities, rules, regulations and safety precautions. The dormitory will provide a place for temporary employees and volunteers to live or spend the night while working in the KRNCA.

The impact to vegetation at the Administrative Site will be the removal of approximately two acres of grass, some brush and poison oak and several small conifers. No riparian vegetation will be removed, and no disturbance to Bridge Creek will occur. Small mammals and birds are already habituated to the human use currently occurring at the site, so their disturbance will be minimal. There will be minor impacts to the soil as construction occurs. Erosion will be minimal as most of the soil disturbance will be on level ground and work will occur only during the non-rainy seasons. Infiltration trenches will be constructed as necessary to prevent sediment and excess water discharge into Bridge Creek. Water usage is expected to increase slightly from what is now being pumped out of Bridge Creek. The impacts to anadromous fisheries resulting from a small increase in domestic water consumption will be negligible.

The restoration and repair of the Wailaki, Nadelos, Tolkan and Mattole Campgrounds will have many positive impacts. The recreation experience for those people who visit these areas will be enhanced by providing them with facilities that function properly and are visually attractive. New restrooms will not only look better with less odor, but will provide access for disabled people. Replacing the vaults will prevent groundwater infiltration into the tanks and possible leakage of sewage into Bear Creek or the Mattole estuary. This will have an overall beneficial impact of improving health standards and groundwater quality. By overhauling the water supply systems, visitors will be assured of clean and safe drinking water. By relocating the Mattole Campground several hundred meters south of its existing location, the new facilities will no longer be subject to inundation from the Mattole River. The relocating of the Mattole Campground may decrease the habitat of beach layia, a federally listed endangered species. Surveys and analyses for impacts on this plant must be completed before campground relocation plans are firmed up. Visitors will be less likely to disturb sensitive wildlife habitats as they will be recreating father away from the estuary. Impacts to several archeological sites located just south of the new campground site could increase slightly because of increased numbers of visitors recreating nearby.

The redesign and restoration of Tolkan Campground will provide increased opportunities and use by equestrians. Other recreation user group types will be displaced to the other developed campgrounds. Impacts on soils, vegetation and wildlife will be negligible as the area has already been highly disturbed by heavy mechanical equipment during the construction of a 100 foot wide firebreak in 1989.

The development of a parking area on the bluff overlooking Black Sands Beach will require the acquisition of seven privately owned lots, improvement of an existing but unmaintained access road and the removal of nearly two acres of vegetation for parking and picnic facilities. Soil erosion is expected to be minimal because nearly all the surface disturbing activities will occur on level ground. The Douglas-fir trees located on the eastern edge of the site will be left intact to help stabilize the bank and screen the parking area from nearby private residences. Split-rail fencing will be constructed at the edge of the bluff to reduce the potential for injuries.

The proposed Honeydew Campground is located adjacent to Honeydew Creek on a five acre terrace. New facility construction involves from six to 10 campsites, a loop road, restroom and potable water system. Active streambank erosion is currently occurring and it may be necessary to stabilize stream bank artificially with vegetation (bank stabilization can be done aesthetically and to the benefit of salmonids). Approximately half of the area will be disturbed as development occurs. This will include vegetation, which is almost entirely composed of grasses, and the A horizon of the soil. The clearing of natural vegetation and substrate material could result in the mortality of some animals. Increased human activity concentrated at the site will discourage habitation by many animals that exist here, and they will be displaced to other similar habitat nearby. No rare, threatened or endangered species are known to exist at any of the facility development sites mentioned above except for the Mattole Campground, as mentioned above. Spotted owl surveys will be conducted before any surface disturbing activities occur. A survey of cultural resources was conducted in 1990 and none were found at any of the aforementioned locations.

Trail Development - The five miles of new trail construction will involve the removal of manzanita and some small hardwoods along the trail corridors that average about five feet in width. The actual trail tread will be two feet wide, so soil disturbance and erosion will be negligible. Water bars will be placed along the steep trail segments to promote water runoff and reduce erosion. This will also help reduce the frequency and cost of maintenance. These new trails will provide human access to previously unused areas. Some of the wildlife species less tolerant of human contact could alter their seasonal use patterns and possibly relocate to more primitive areas. Other animals may choose to use the trails as travel corridors in order to avoid the dense vegetation. In either case, these impacts will be minimal.

The other trail developments involve the relocation of portions of existing trails and the rehabilitation of abandoned logging roads. Soil erosion is anticipated to decrease and water quality improve by providing water bars, outsloping, placing rock walls on the inside portion of switchbacks and stabilizing slides along these trail corridors.

Completion of the trails will enhance the overall wilderness characteristics of the WSA's by providing backpackers, who tend to congregate along the beach, with a means of dispersing themselves into upland areas that receive relatively little visitor use. The potential for

overcrowding along the coastal trail will be reduced as well as the likelihood of having to implement a permit system to regulate and control recreation uses.

Reliable water sources are a necessity for extended backcountry trips. By developing six springs in critical locations where drinking water is scarce, all trail users will be able to resupply their water needs instead of becoming extremely dehydrated. These water supply sources will also benefit wildlife as they will be available for their use as well.

Wilderness Alternative

Under this alternative, the impacts on wildlife would be slightly less than the Proposed Action. The lack of new hiking or equestrian trails within the WSA's would keep visitors from travelling into previously isolated areas and possibly disturbing particular animals or birds that prefer living in remoteness. Portions of the Lost Coast Trail along the coast would periodically become overcrowded, however, which could have a greater impact on marine mammals and sea birds than the Proposed Action. Opportunities for visitors to find secluded places away from others would be more difficult.

This alternative would preclude relocating the Mattole Campground out of the existing floodplain and farther away from the estuary. Visitors would continue to recreate near the mouth of the Mattole River and disruption to wildlife would be greater than what will occur under the Proposed Action.

Wilderness values of naturalness, solitude, primitive or unconfined recreation and the area's special features (geology, outstanding scenic values, significant cultural resources) would be retained and slightly improved as a result of not maintaining the 20 miles of roads that border or penetrate the WSA's. These roads would eventually have to be closed to vehicles as a safety precaution, eliminating approximately 2,000 visitor days of motorized recreational use. Pedestrian and equestrian use, however, would increase and their recreation experience enhanced. The lack of road maintenance could accelerate soil erosion and landslides if water is kept from flowing off the road surface. This could lead to sediment transport into streams and cause negative impacts to fish habitat and water quality.

By not maintaining existing helispots, the ability to suppress uncontrolled wildfires would be severely limited. Firefighting efforts would focus on using heavy mechanical equipment instead of helicopters. The area's naturalness would benefit slightly as the existing helispots became vegetated.

This alternative would preclude the installation of an effective vehicle barrier at Gitchell Creek. Off-highway vehicles would continue to travel north along the beach into a designated closed area and disrupt the wilderness experience of backpackers hiking the heavily used Lost Coast Trail.

No Action Alternative

Under this alternative, there would be less facility development than the Proposed Action but more than the Wilderness Alternative. The existing Black Sands Beach Parking Area would be

improved at its current location by installing a potable water system and restroom. Large quantities of rock would have to be placed along the beach next to Telegraph Creek, forming a rip-rap structure, to prevent further erosion of the parking area. This would result in a minor negative impact on scenic quality.

The campground at the Mattole River estuary would not be relocated, but improved at its existing location by gavelling the parking area, installing a new restroom and providing more picnic tables and cooking grills. The new facilities would still be subject to periodic flooding when the spit closes and the estuary enlarges. Impacts on wildlife would increase as a result of the anticipated increase in visitor use activities in close proximity to sensitive habitat areas.

The construction of visitor information sites near Honeydew and Petrolia would serve as focal points for visitors to obtain information about the area's resource values, recreation opportunities, rules, regulations and safety precautions. The potential for visitors unintentionally harming the resources and other peoples' property, rights or enjoyment of the KRNCA would be substantially reduced.

Improving the Landergen Tie Road would provide easier access to the other roads within the KRNCA and to the King Crest and Lightning Trailheads. In the event of a wildfire, this road would provide the only means by which heavy mechanical equipment could access the east slope of the KRNCA. Minor impacts to the fishery resource of Honeydew and Bear Creeks could occur from sediment transport into the streams if the road was not constructed or maintained properly.

Impacts from developing loop trails within the Honeydew Creek drainage, around Point No Pass and at the Shelter Cove Lots would be greater than both the Proposed Action and the Wilderness Alternative. More vegetation would have to be removed and soil erosion would be greater due to the steepness of the terrain. Increased visitor use in the Honeydew Creek watershed could negatively impact sensitive wildlife species that prefer remote areas away from sights and sounds of humans. Providing more trails in the upland areas would help draw backpackers away from the heavily used coastal trail and help reduce congestion along the beach. New trails leading to the tidepools at Shelter Cove would provide more opportunities for visitors to observe and learn how this sensitive ecosystem functions, but could result in overuse and possible habitat disturbance. Periodic monitoring of this valuable resource would minimize these impacts.

Cumulative Impacts.

The Visitor Services Plan delineates five visitor management zones, ranging from rather extensive, low development zones (Visitor Management Zone 1, managed to be essentially free of on-site physical facilities) to areas of concentrated human use and facilities to serve them (Zones 4 and 5, where paved roads, camping facilities, staging areas, etc., are present). With the exception of the developed Shelter Cove area (Zone 5), the developed campgrounds (Zone 4) and the Administration Site (Zone 4), all facilities will be limited to the minimum essential to provide services identified as appropriate for the particular zone. It is the intent of the VSP to limit man's influence to those few developed sites, and manage the remainder of the KRNCA to assure that the natural qualities of the area receive little human impact. By designing facilities

that visually merge with the surrounding environment, and with the bulk of the structural developments located on the periphery of natural areas, impacts will be kept to a minimum.

The overall impacts will be minimal, and will not cause undue degradation of the area's naturalness.

The King Range offers a recreational experience found nowhere else on the Pacific Coast. Other areas, such as National Parks, State Parks and various wilderness areas administered by federal agencies, offer exposure to inland, high elevation terrain or the dense redwood forests along Highway 101. The King Range beach offers solitude, undisturbed beaches and little evidence of man. The ridgeline trails surrounding King's Peak and Chemise Mountain offer coastal vistas unique to this section of the California Coast. A variety of sea animals and birds complement their terrestrial cousins, offering the King Range user an unparalleled experience.

Public Participation, Consultation, Contacts, and List Of Preparers

A. Public Meeting Attendees of Record
(listed by order of register entry)

1. Eureka, CA, 11/28/89

Individual	Representing
Fred Horton	Off-Road Advertiser
Dona Miller	Northwest Trail Riders
Charles Haynes	Northwest Trail Riders
Crystal Arbuthnot	Mounted Mountaineers
Craig Spjut	
Dean Childs	
Cindy LeGrand	No. CA Horsemen's Association &
Robert Beard	CA State Horseman's Association
Michael LeGrand	
Carole Polasek	No. CA Horsemen's Association
Darrel Polasek	" " " "
Teresa Mello	" " " "
Edie Whitehead	Humboldt Bay Quarterhorse
Katherine Sousa	Association (HBQA)
Jackie Sousa	HBQA
Susie Van Kirk	
Ricky Chase	CA State Horsemen's Association
Mary Sue Chase	" " " "
Lona Parton	NCHA & CSHA
Hartwell H. Welch	

2. Petrolia, CA, 11/29/89

Linda Smith Franklin	Native Land Uses
Harold Lewis	

Margaret Lewis
Ali Freedlund
Tim Bailey
Jeff Westergard
Rex Rather
Annie Keyser
Mark Fleaer
Mary Etter
Anne Smith
Russell Chambers

3. Shelter Cove, CA, 11/30/89

Jeane Elder	Resort Improvement Dist.
Gary Elder	(RID)
Raye Anderson	
Reese Anderson	RID Director
Susan Moir	
William L. Wisehart	Sinkyone Wilderness S.P.
Anne Smith	
Harold Lewis	
Margaret Lewis	
Venice Strange	
Riba Silk	
Anthony M. Stramaglia	
Ray Lingel	
FloAnn Ghigliazza	
Gene A. Biven	Bear Crk. Watershed Association
Pat Gary	
Marilyn Machi	
Ruth Baccus	
Jake Lusty	
Deva Wolf	
Dick Carpenter	
Carre Carpenter	
Eric Shafer	
Ben Fieseler	Surfing Access Issues
Mario Machi	
Shirley Machi	
Airi Kulpa	
William Bell	Surfrider Foundation
Greg Mullins	
Betsy Mullins	
Rondal Snodgrass	
Stephanie Snodgrass	
Seth Snodgrass	
Ray Wilcox	

Janine Wilcox
H.W.(Lucky) Young
J. Dawson
Dylan Snodgrass
Bonnie Glantz

B. Agencies, Individuals and Groups Contacted or Consulted

American Wilderness Alliance
American Fisheries Society
Bear Creek Watershed Association
Greg Blomstrom
Bureau of Indian Affairs
BLM Advisory Council
BLM Lands Foundation
CA Association of Four Wheel Drive Clubs
CA Coastal Commission
California Cooperative Fishery Unit
CA Department of Boating & Waterways
CA Department of Conservation
CA Department of Forestry & Fire Protection
CA Department of Parks & Recreation
CA Department of Fish & Game
CA Department of Water Resources
CA Division of Oil & Gas
CA Division of Mines & Geology
California Energy Co., Inc.
CA Farm Bureau
CA State Board of Equalization
CA State Board of Forestry
CA State Lands Commission
California Native Plant Society
CA Office of Planning & Resources
California State Automobile Association
CA State Horseman's Association
CA State Grange
CA State Water Resources Control Board
California Trapper Association
Californians for Wilderness
California Wilderness Coalition
California Woolgrowers Association
Central Valley Regional Water Quality Control Board
Citizens for Mojave National Park
Citizens for Urban Wilderness Areas
City of Sacramento Public Works Department
County Supervisors Association
Desert Trail Association

Earth First!
Ecology Center of So. California
Econews
Eel River Sawmills, Inc.
Environmental Center of San Luis Obispo County
Environmental Defense Network
Environmental Protection Agency
Environmental Protection Information Center
Eureka City Council
Fish & Game Advisory Committee
Friends of the Dunes
Friends of the Earth
Friends of the River
4 x 4 Dune Buggy News
Fort Bragg/Mendocino Chamber of Commerce
Garberville/Redway Chamber of Commerce
Georgia Pacific Corp.
Thomas S. Hannah
Heartwood College
Homestake Mining Co.
Humboldt Bay Harbor District
Humboldt County Assessor
Humboldt County Board of Supervisors
Humboldt County Parks Department
Humboldt County Planning Department
Humboldt County Public Works Department
Internal Revenue Service
King Range Property Owners
King Range Steering Committee
King Range Technical Review Team
Lake County Visitor Information Center
Long Tom Watershed Taxpayers Association
Lost Coast League
Lost Coast Llama Caravans
Marin Co. Board of Realtors
Mattole Watershed Salmon Support Group
Mattole Forest and Rangelands Cooperative
Mattole Watershed Taxpayers Association
Mattole Restoration Council
Mattole Valley Community Center
Mendocino County Air Pollution Control District
Mendocino County Assessor
Mendocino County Archaeological Commission
Mendocino County Board of Supervisors
Mendocino County Department of Public Works
Mendocino County Farm Advisor
Mendocino County Farm Bureau

Mendocino County Planning and Building Services Department
Mendocino County Planning Department
Mendocino Environmental Center
Mendocino County Parks and Beaches
Mendocino 4 x 4's
Native American Heritage Commission
Northwest Information Center, Sonoma State University
One Shot Mining Co.
Palo Verde Products
Planning and Conservation League
Petrolia Garden Project
Protection of Nature in Israel
Marlene & Crandall Ray
Red Mountain Association
Redwood Community Radio KMUD
Sierra Club
Sinkyone Tribal Council
Mr. & Mrs. David Silva
Shelter Cove Resort Improvement District
Gordon F. Snow
So. Utah Wilderness Alliance
Tehama Alliance for Resources and Environment
The Nature Conservancy
The Wilderness Society
Trust for Public Land
UC Cooperative Extension Service
US Army Corps of Engineers
USDI, Bureau of Mines
USDA, Forest Service
USDI, Fish & Wildlife Service
USDI, National Park Service
USDI, Soil Conservation Service
Ukiah District Advisory Council
Ukiah Downtown Merchants Association
We Care
Western Mining Council
Wildlife Conservation Board

C. Plan Preparers

1. Public Volunteer Planning Team Members

Cindy LeGrand
Will Bell
Rick Chase
Dylan Snodgrass
Craig Spjut

Gary Elder
Clark Guzzi
Lona Parton
Fred Horton
Linda Smith-Franklin
Ray Lingel
Reese Anderson
Raye Anderson
Mel Lynn
Lynn Ryan
Don Gribi
Lisa D. Hoover

D. BLM Preparers and Reviewers

a. Preparers	Title	Responsibilities
Dan Averill	Sup. Res. Mgt. Spec.	Environment
Paul Boos	Outdoor Recreation Planner	Document Format
Vicki Campbell	Fisheries Biologist	Fisheries
Bruce R.Cann	Outdoor Recreation Planner	Editor
Thomas Dematte	Forester	Forestry
Marlene Greenway	Archaeologist	Cultural Resources
Charlotte Hawks	Realty Specialist	Lands
Steve Hawks	Wildlife Biologist	Wildlife
Diane Knox	Realty Specialist	Graphics
John Lloyd	Area Manager	Oversight
Ethel McMilin	ADP Coordinator	GIS
SuZan Meiners	Interpreter	Interpretation
Susan Richey	Clerk/Typist	Logistics
Lynda Roush	Area Manager	Oversight

Caroline Stimson	Volunteer Interpreter	Interpretation
Joe Williams	Outdoor Recreation Planner	Lead Writer, Draft Plan

Planning Process

1. Planning Schedule

During September, 1989, an analysis of the size, costs, personnel needs and other factors related to developing a visitor services plan for the KRNCA was made by Bureau personnel. The results of this exploration were written in the KRNCA Visitor Services Pre-Plan Analysis or PPA.

The PPA describes the area to be covered by the plan, the plan's objectives, the constraints which would affect the scope and effect of the plan, an initial set of issues to be addressed in the plan, data needs, participants in the planning effort, how public participation would be accomplished, a planning schedule and cost estimates. The PPA was then presented to the King Range Steering Committee on September 21, 1989 for their advice concerning constraints and issues. The PPA was accepted by the Ukiah District Manager in October of 1989 after which planning staff recruitment and orientation was begun and public scoping meetings were scheduled.

2. Public Scoping.

In order to help identify the major issues which the visitor services plan would be designed to resolve, the general public was invited to participate in scoping or issue identification meetings. Three evening meetings were held. The first was held at the Red Lion Inn in Eureka, California, on November 28, a second meeting was held at the Mattole Grange in Petrolia, California, on November 29, and a third meeting was held at the Shelter Cove Community Center on November 30, 1989.

At each of these meetings interested citizens were invited to assist BLM in the planning process by working with BLM staff. Via news releases, the general public was also invited to identify issues and concerns by writing to the Arcata Resource Area Office. January 1, 1990 was established as the final date for accepting issues or comments concerning this KRNCA planning process.

Over two hundred comments were received, of which there were a total of 179 individual issues or concerns expressed.

3. Planning Team

At the public scoping meetings fourteen private citizens signed up to volunteer their time to assist in the planning effort. Along with the planning team leader, one volunteer and one

paid natural resource interpreter, these fourteen citizens formed the core planning team. The planning team met approximately two evenings each month from January through April to identify issues and potential management actions. These private citizens worked without any form of remuneration for at least four hours each meeting.

Team members came from a wide geographic area, ranging from McKinleyville to Middleton, and as far east as Redding. Most meetings were also attended by interested citizens representing themselves or organizations and special interest groups. Planning team participation was open to anyone willing to help, and the team met alternately in Arcata and the Garberville area to reduce driving times for at least some of the participants for each meeting.

4. Pre-Plan Analysis

The management actions were generated by the planning team to address the major issues, and were grouped by major issue heading in the draft management plan. Some of the management actions proposed by the planning team as potential issue resolutions were rejected by the Arcata Area Manager during a meeting with the planning team on April 24, 1990. The remaining management actions formed the draft management plan and are the proposed action for the environmental assessment process.

5. Draft Plan and Environmental Assessment

The draft plan was assembled by BLM staff in Arcata, Redding, Ukiah and Sacramento. The draft plan described proposed management actions, the schedule for implementing the actions, the staffing necessary to operate the KRNCA and the costs for construction projects, operations and maintenance over the ensuing decade.

The environmental assessment evaluated the impact of the proposed plan upon the human environment, and was used to determine if an Environmental Impact Statement (EIS) was needed to adequately assess the affects of the proposed plan.

6. Public Review

The draft plan and environmental assessment were then published and distributed to those agencies, individuals and groups known to have an interest in the KRNCA. These publics had 30 days to make their comments to the BLM. Following this comment period, the BLM staff and the planning team met to analyze comments and make appropriate changes to the draft plan and environmental assessment. After revisions, the final VSP was developed and a Decision Record stating that no significant impacts will result from implementing the plan.

7. Responses to Public Review of the Draft Plan

Fourteen comment letters were received during the draft plan public comment period. Those comments which addressed items within the scope of this plan or which needed to be addressed in order to reduce confusion over the purpose of the plan have been paraphrased and responses to them are listed below. The original comment letters are on file at the BLM Arcata Resource Area Office.

Comment - The maps in the draft plan are difficult to read.

Response - New, more readable maps will be incorporated in the final document.

Comment - Off-highway vehicle rentals should not be encouraged.

Response - Action 5.4 has been modified to reinforce the concept of allowing only commercial uses which would be compatible with the management objectives for each visitor management zone.

Comment - A blanket wildfire suppression policy seems unwarranted.

Response - The plan does not contain a blanket wildfire suppression policy. The bonfire prohibition described in action 12.4 refers to large conflagrations with flame heights excessive to the needs for a cooking or warming campfire. The term "bonfire" is derived from the term "bone fire", a large, intense fire designed to reduce animal bones to ash. Such fires typically produce flying embers and firebrands which could start wildfires at considerable distances under the right circumstances.

Comment - The term "barrier free trail" is confusing. Does it mean a handicapped access under Action 6.28?

Response - The term "barrier free" is used to describe trails or other facilities which can be utilized by disabled people, including those dependent upon wheelchairs.

Comment - The plan should incorporate a hashing out of off-road vehicle use.

Response - Use of off-road vehicles is specifically provided for under the 1974 King Range Management Program and the King Range Transportation Plan. One of the planning criteria for the Visitor Services Plan was that those two existing plans would not be superseded by this planning process.

Comment - Beach weather shelters and toilets would detract from the King Range's wilderness value, and therefore should not be included in the plan.

Response - This management action has been dropped from further consideration.

Comment - No permitting system should be established because it would detract from the sense of freedom people can experience in the King Range.

Response - BLM must require permits for commercial, competitive, certain off-road vehicle and special area uses by Federal regulations. Individual and group use permits would only be required if heavy visitation appeared likely to jeopardize the management objectives for the various visitor management zones.

Comment - All logging should be eliminated from within the King Range National Conservation Area.

Response - Timber management activities are outside the scope of this plan. They are allowed in certain parts of the KRNCA under the 1974 King Range Management Program.

Comment - The draft plan's environmental assessment is too short and lacking in detail, particularly with regard to archaeological resources.

Response - The section formerly titled Appendix D., Resources in the KRNCA, has been included as the "Affected Environment" portion of the Environmental Assessment. Discussion of archaeological resources in the KRNCA is included. Explicit detail concerning locations and contents of archaeological sites has been avoided in order to protect these sites from looting.

Comment - Vehicles used to maintain toilets and shelters along the beach would have considerable impact upon the environment, therefore such facilities should not be provided.

Response - Shelters and toilets have been eliminated from further consideration.

Comment - The establishment of a Visitor Management Zone 2. (VMZ-2) area around the Smith and Etter cabins seems inappropriate because these cabins are in the central part of the KRNCA, which ought to be the most primitive part.

Response - The VMZ-2 prescription for the vicinity of the Smith and Etter cabins is consistent with the King Range Transportation Plan, which constrains the Visitor Services Plan.

Comment - The plan should include an action which prohibits use of motorized craft and commercially led tours in the KRNCA.

Response - The plan incorporates limitations on both motorized use and commercial activities consistent with the Visitor Management Zones. Outright prohibition of motorized use would be inconsistent with the 1974 King Range Management Program and the King Range Transportation Plan.

Comment - Action 6.14 conflicts with Action 3.15.

Response - Action 3.15 concerns cooperating with the private landowners at Big Flat to reduce the effects of private development and use on the area's primitive values. Action 6.14 concerns construction of low-profile, inconspicuous weather shelters at Big Flat and other locations along the coastal strand. This action has been eliminated from the plan.

Comment - The Smith-Etter Road should be open to general public vehicle use to a terminus parking area near the beach, as was depicted in the 1974 King Range Management Program.

Response - The King Range Transportation Plan included a provision to close the Smith-Etter Road at Telegraph Ridge if vehicle use could not be controlled at a parking area near the beach. Non-compliance with vehicle use restrictions by some visitors forced the elimination of general public vehicular access beyond Telegraph Ridge.

Comment - BLM should not provide weather shelters along the beach. Visitors should be prepared for weather changes.

Response - The proposal to build weather shelters (Action 6.14 in the draft plan) has been eliminated.

Comment - There is a discrepancy between the numbers used for frequency of contact between visitors in Visitor Management Zone 1 (6-8 group encounters per day on page 17 and 1-2 parties per day on page 41.). Also, the basis used for establishing use "quotas" (capacities) is not referenced.

Response - The contact frequency number used in the draft VSP on page 17 was in error. This error has been corrected for the final plan. The contact frequency numbers are based upon the Social Setting Criteria matrix for the Recreation Opportunity Spectrum (ROS) Primitive Setting Opportunity Class Criteria. Both the BLM and Forest Service use the ROS system as part of their recreation inventory and planning tool kit. Additional information concerning the ROS system may be found in BLM Manual 8320.

Comment - Both the Wilder Ridge and Horse Mountain Roads are too narrow for safety. They should be widened to allow two RV's to be able to pass.

Response - Both of these are county roads, outside the scope of this plan. Any widening or other improvement work would have to be performed under county control. The VSP does include actions which advocate interagency cooperation in resolving situations related to visitor use and management.

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GLOSSARY

Allotment - An area of Federal land for which a livestock operator has a license to graze livestock.

Anadromous Fish - Fish that migrate as adults from the ocean into fresh water streams to reproduce.

ACEC - Area of Critical Environmental Concern - Public land where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

Commercial Forest Land - Forest land that is now producing or is capable of producing at least 20 cubic feet of wood per acre per year of commercial tree species.

Critical Winter Range - A specific area within a general winter range that receives a higher degree of use and is of greater significance to migrating deer and elk during winter months.

Cultural Resource - Any definite location of past human activity identifiable through field survey, historical documentation, or oral evidence; includes archaeological sites, structures, or places, and places of traditional cultural or religious importance to specified groups whether or not represented by physical remains.

Cultural Site - Any location that includes prehistoric and/or historic evidence of human use or that has important socio-cultural value.

Environmental Impact Statement (EIS) - A formal document to be filed with the Environmental Protection Agency that considers significant environmental impacts expected from a major Federal action.

Historic Site - A cultural resource resulting from activities or events dating to the historic period.

National Register of Historic Places - A formal list, established by the National Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation at the local, state or national level.

Off-Road Vehicle (ORV) - Any motorized vehicle capable of travel over land or water.

Recreation Experience Opportunity - The opportunity for a person to realize predictable psychological and physiological outcomes from engaging in a specific recreation activity within a specific setting.

Recreation Opportunity Spectrum (ROS) - A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities. The spectrum contains six classes ranging from Primitive to Urban. Each class is defined in terms of physical, social and managerial characteristics. See BLM Manual Part 8320.

Scenic Quality - The relative worth of a landscape from a visual perception point of view.

Visual Resources - The visible physical features on a landscape: e.g., land, water, vegetation, animals, structures, and other features.

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